Phytoplankton Primary Production, Chlorophyll, Biomass and Suspended Carbon in the Experimental Lakes Area - 1982 Data

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Canadian Data Report of

Fisheries and Aquatic Sciences 438

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TABLE OF CONTENTS

	Page
ABSTRACT/RESUME	iv
INTRODUCTION	1
FIELD PROCEDURES	1
LABORATORY PROCEDURES	1
DATA PRESENTATION	2
ACKNOWLEDGMENTS	2
REFERENCES	2

LIST OF APPENDICES

Appendix		Page
1	"Present Site" lake basins. Data relevant to each sampling time and date are presented chronologically according to lake basin studied	3
2	"Present Site" lake basins. Figures showing photosynthetic carbon uptake versus incubator irradiance are presented chronologically with respect to lake basin	26
3	"New Site" lake basins Data relevent to each sampling time and date are presented chronologically according to lake basin studied	93
4	"New Site" lake basins. Figures showing photosynthetic carbon uptake versus incubator irradiance are presented chronologically with respect to lake basin	98

ABSTRACT

DeBruyn, E. R., J. A. Shearer, and D. L. Findlay. 1984. Phytoplankton primary production, chlorophyll, biomass and suspended carbon in the Experimental Lakes Area - 1982 data. Can. Data Rep. Fish. Aquat. Sci. 438: iv + 110 p.

Incubator measurements of photosynthetic carbon uptake by phytoplankton were conducted for twenty eight lake basins in the Experimental Lakes Area. Corresponding chlorophyll, suspended carbon and algal cell counts converted to biomass are also given. The methodology is briefly described with the resultant data tabulated and graphically presented.

Key words: photosynthesis; incubation; suspended matter.

RESUME

DeBruyn, E. R., J. A. Shearer, and D. L. Findlay. 1984. Phytoplankton primary production, chlorophyll, biomass and suspended carbon in the Experimental Lakes Area - 1982 data. Can. Data Rep. Fish. Aquat. Sci. 438: iv + 110 p.

On a effectué l'analyse en incubateur du phytoplancton des vingt-huit lacs de la Région des Lacs Expérimentaux pour en mesurer l'absorption de carbone photosynthétique. Ce rapport renferme les données connexes sur la chlorophylle, le carbon en suspension et le nombre de cellules alguaires converties en biomasse. En outre, il traite brièvement de la méthodologie employée et présente les résultats de l'étude sous forme de tableaux et de graphiques.

Mots clés: photosynthèse; incubation; matières en suspension.

INTRODUCTION

Phytoplankton primary production was measured in twenty eight lake basins in the Experimental Lakes Area during 1982 using a light incubator technique. This technique has been described in detail in a manual on phytoplankton primary production Shearer et al. (in prep.) as well as in previous reports of this series (see DeBruyn et al. 1982). Measurements of chlorophyll a, suspended carbon and biomass were also made for each of the lake basins studied.

This report outlines changes made to the light incubator methodology during the year. The accumulated data for carbon uptake versus irradiance, chlorophyll, suspended carbon and biomass are presented in either graphic or tabular form.

FIELD PROCEDURES

Phytoplankton primary production studies were conducted on two groups of lake basins"

PRESENT SITE LAKES

114	302N
222	302S
223	303
224	304
226NE	305
226SW	382
227	382 Bay
239	661

NEW SITE LAKES

93	421
110	423
111	430
373	622
375	629
377	658

Both groups of lake basins studied are located in the Experimental Lakes Area, northwestern Ontario described by Brunskill and Schindler (1971) and Cleugh and Hauser (1971) (see also Johnson and Vallentyne 1971).

Lake basins 114 and 223 were again undergoing a controlled acidification program with additions of H_2SO_4 (Schindler et al. 1980). Lake 227 was in its fourteenth year of a nutrient enhanced eutrophication program. Basins 226NE and 226SW were in their second year of recovery following eight years of nutrient additions (Schindler 1975; Schindler and Fee 1974). A reinforced plastic "sea curtain" was maintained between the two basins of Lake 226. The "sea curtain" installed between basins 302N and 302S in 1981 was maintained through 1982. 1982 was the first year of an acidification program for Lake 302, whereby 302N was receiving nitric acid additions and 302S sulfuric acid additions. A "sea curtain" was also in place between basin 382 and 382 Bay but no experimental perturbations were ongoing in either basin. All other basins were not being experimentally perturbed.

Except for lakes 661 and 303, "present site" lake basins were sampled in a manner similar to that described by DeClercq and Shearer (1978). An integrating sampler (Shearer 1978) was used to collect either 2.5 or 4.4 L of epilimnion, metalimnion or hypolimnion water from the euphotic zone of each basin at 2, 3 or 4 week intervals. Concurrent light attenuation measurements (Shearer and DeBruyn 1983) were used to determine euphotic zone depth and subsequent integral production rate calculations (Fee 1977). As both 661 and 303 are shallow lakes and mixed to the bottom only surface samples were taken from these lakes. All of the "new site" basins were sampled from a helicopter allowing only surface samples to be taken from the epilimnion. All samples were returned as quickly as possible to the laboratory in light-tight insulated containers.

LABORATORY PROCEDURES

The methodology described by DeBruyn et al. (1982) and DeClercq and Shearer (1980) for processing field samples in the laboratory was unchanged through 1982. Subsamples were retained, prior to incubation, for dissolved inorganic carbon (DIC), chlorophyll and suspended carbon analyses. Subsamples preserved with Lugol's solution were taken for algal cell counts, species identification and biomass calculations (Findlay and Saesura 1980).

A new incubator design was implemented in 1982. The new incubator features a single metal halide light source with high irradiance output and low heat generation as compared to previously used old type incubator's quartz-halogen light source. Less water for subsampling is needed from each lake because the new incubator uses 60 mL incubation bottles. This reduces both field and laboratory handling time. A flow-through refrigeration unit, together with minimal heat output from the light source makes constant temperature maintenance simpler in the single water bath incubator. A more detailed description of the new incubator design is given in Shearer et al. (in prep.). A comparison of daily depth integrals calculated from both the old and new incubator results for the first six weeks of 1982 showed a strong correlation ($r = .979$, $n = 38$) between the two incubators with a slope of .85 and an intercept of 5.79. A paired sample test showed a significant difference between the two incubators with the old incubator results generally giving higher calculated integrals.

Using a repeating injections system, 0.3cc of approximately 2.0×10^5 becquerels of $Na^{214}CO_3$ stock solution was injected into each 60 mL bottle to be incubated. Because the level of radioactivity added each day may vary, the activity of the "labelled" stock solution was measured daily by direct measurement as described by DeClercq and Shearer (1980).

All incubated samples were acidified and bubbled in a manner similar to that described by DeBruyn et al. (1982) and Shearer et al. (in prep.). After acidification and bubbling, PCS (Amersham/Searle) scintillation fluor was added

to each vial. All vials were counted on either a Beckman LS8000 or LS7500 liquid scintillation counter.

Light as scalar quantum irradiance was measured in each of the incubator chambers using either a Biospherical Instruments QSL 100 or a Biospherical Instruments QSR 200 spherical sensor.

PRESENTATION OF DATA

Appendix 1 contains the physical, chemical and biological parameters collected in this study for "Present site" lake basins.

Appendix 2 graphically presents carbon uptake versus irradiance data resulting from the incubator experiments on "Present site" lake basins.

Appendices 3 and 4 present information for "New Site" lakes corresponding to appendices 1 and 2, respectively.

ACKNOWLEDGMENTS

We would like to express our appreciation to G. Linsey and his staff and M. Stainton and his staff for their assistance in processing DIC, suspended carbon and chlorophyll samples. A special note of appreciation is given K. Tyson for her capable assistance in processing lake and incubator samples and assisting in initial data analyses from May through September.

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APPENDIX 1

"PRESENT SITE" LAKE BASINS

Data relevant to each sampling time are listed chronologically according to lake basin.

"Inc Typ" refers to type of light incubator used for incubations. 0 - represents old incubator, 1 - represents new incubator.

The date stated is that of sample collection and incubation. The time of actual field collection is reported as Central Daylight Time.

The depth is the range from which the integrated water sample was taken.

Temperature is that at which the incubation was carried out and may vary ±1°C. Dissolved inorganic carbon (DIC) analysis was done on pre-incubation water samples. Units reported are micromoles L^{-1}. Values for suspended carbon and chlorophyll are in micrograms L^{-1}.

Values I1 through I4 are incubator irradiances in microeinsteins m^{-2} sec^{-1}.

Values P1 through P4 are rates of inorganic carbon uptake at the four separate incubator irradiances in units of milligrams carbon m^{-2} h^{-1}. The two given values at each irradiance are those of replicate samples.

The mean coefficient of variation (C.V.) of the four sets of replicates are given. $$$$$ occurs when negative values appear under P4 and P3 causing the C.V. value to exceed the field width of 999.9. See Note: 1 and 2.

Live biomass is calculated from algal cell counts and approximated cell volumes of the species encountered in the sample. Values are reported in grams m^{-3}.

Notes:

1. Production values are unusually erratic or differ from expected results and should be considered with caution.

2. Missing values are denoted with -10.00. The sample may have been lost during the incubation or not processed.
3. $NaHCO_3$ was added to the sample prior to incubation.
4. HCL was added to the sample prior to incubation.
5. Samples were incubated at a temperature other than from which the lake sample was taken.

LAKE 114

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
0	4 MAY	0.0- 1.5	0835	8.0	118	290	.6	10	.10 .11	41	1.03 1.16	153	3.36 2.26	733	2.23 3.60	19.01	.66	
1	4 MAY	0.0- 1.5	0835	8.0	118	290	.6	2	.06 .05	29	.34 .27	307	2.48 2.31	548	2.53 3.14	12.34	.66	
0	10 MAY	0.0- 4.0	0905	10.0	66	490	1.3	13	.18 .16	40	.83 .60	159	2.98 2.97	830	3.27 3.37	8.11	.85	
1	10 MAY	0.0- 4.0	0905	10.0	66	490	1.3	3	.01 .03	36	-10.00 -10.00	374	3.77 3.62	913	3.66 3.41	18.30	.85	1,2
0	24 MAY	0.0- 4.0	0815	15.5	38	580	3.0	13	.30 .31	43	1.52 1.49	158	6.70 6.76	913	8.81 9.87	3.24	2.14	
1	24 MAY	0.0- 4.0	0815	15.5	38	580	3.0	5	.01 0.00	22	.30 .21	208	4.47 5.36	847	5.60 6.92	48.44	2.14	
0	7 JUN	0.0- 4.0	0900	17.0	86	860	5.9	10	.56 .54	38	3.06 3.27	135	15.38 15.94	830	24.36 23.65	3.03	1.85	
1	7 JUN	0.0- 4.0	0900	17.0	86	860	5.9	6	.04 .13	37	2.43 2.27	183	16.68 15.52	863	18.96 17.05	22.34	1.85	
1	21 JUN	0.0- 4.0	0945	17.0	29	700	2.7	12	-.04 .03	47	.52 .48	257	5.15 5.28	1095	6.09 6.70	4.72	2.18	
1	5 JUL	0.0- 4.0	0805	19.5	49	1730	7.6	7	.32 .28	28	2.15 2.25	90	7.64 10.01	349	11.73 12.73	9.35	2.33	
1	19 JUL	0.0- 4.0	0910	20.5	41	1410	6.0	13	.21 .25	53	2.29 1.98	208	9.78 9.72	913	11.84 13.85	8.44	4.79	
1	2 AUG	0.0- 4.0	0915	20.5	39	1420	7.4	16	.29 .12	70	4.30 4.16	254	13.40 12.35	1117	21.64 21.03	17.26	5.32	
1	16 AUG	0.0- 4.0	0840	22.0	37	2220	8.0	18	1.15 .41	71	3.80 4.29	242	15.84 15.94	896	24.33 22.19	20.72	8.38	1
1	30 AUG	0.0- 4.0	0905	16.0	34	1830	8.3	11	.23 .25	46	2.30 2.10	160	9.88 9.46	707	16.41 17.78	5.48	5.65	
1	13 SEP	0.0- 4.0	0850	17.5	34	780	11.8	13	.35 .39	47	3.82 3.29	161	15.04 14.71	633	26.02 25.63	5.64	1.93	
1	27 SEP	0.0- 4.0	1000	13.0	28	1690	8.1	7	.02 .06	29	.79 .83	103	5.01 5.09	412	11.76 11.97	20.63	4.54	
1	11 OCT	0.0- 4.0	0905	9.8	33	1290	12.3	8	.16 .12	29	1.13 1.21	105	5.43 5.55	420	10.81 11.46	6.95	6.14	
1	26 OCT	0.0- 4.0	0930	7.5	37	1440	7.4	12	.18 .21	48	1.45 1.60	171	5.08 5.46	729	6.36 6.35	5.80	4.23	

LAKE 222

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
0	17 MAY	0.0- 2.0	0935	10.0	210	510	2.8	11	.55 .71	38	2.00 2.16	141	7.57 7.78	847	8.67 7.51	8.70	1.08	
1	17 MAY	0.0- 2.0	0935	10.0	210	510	2.8	1	.13 .08	14	.94 .68	128	4.71 7.37	589	8.29 5.78	28.58	1.08	
0	18 MAY	2.0- 4.0	0900	8.5	286	520	2.9	10	.39 .45	34	1.81 2.30	161	4.94 5.07	861	5.71 5.43	7.90	.64	
1	18 MAY	2.0- 4.0	0900	8.5	286	520	2.9	3	-.03 .06	12	.37 .32	98	3.10 3.28	407	4.02 4.63	8.44	.64	
0	14 JUN	0.0- 1.5	0940	16.0	171	820	2.7	13	.03 -.04	45	.57 .61	173	3.48 3.18	1029	4.56 2.95	$$$$$	.89	
1	14 JUN	0.0- 1.5	0940	16.0	171	820	2.7	9	.14 -.12	43	.72 .28	241	2.42 2.90	1029	3.40 3.72	434.98	.89	
0	15 JUN	1.5- 4.3	0930	12.0	309	300	2.4	10	1.27 .02	32	.89 1.01	118	2.11 5.04	697	4.67 2.89	59.17	.59	1
1	15 JUN	1.5- 4.3	0930	12.0	309	300	2.4	7	-.14 -.05	25	.41 .12	146	1.64 1.58	647	2.83 1.85	36.12	.59	
1	12 JUL	0.0- 1.3	0900	21.0	170	460	1.7	15	.04 .04	66	1.50 1.27	232	6.70 5.92	963	7.42 6.60	9.18	1.31	
1	12 JUL	1.3- 4.0	0905	14.0	295	480	4.0	6	.04 .08	24	.46 .57	78	2.49 1.24	297	4.49 5.86	31.73	.89	
1	9 AUG	0.0- 3.0	0840	19.5	180	420	5.0	14	.15 .14	61	1.26 1.18	211	3.77 4.32	896	6.78 5.98	6.46	.83	
1	9 AUG	3.0- 4.0	0850	13.5	522	520	7.7	9	.13 .16	32	1.23 1.54	169	4.97 6.26	432	8.59 6.50	15.51	.33	
1	6 SEP	0.0- 3.0	0955	15.0	201	500	5.1	15	.12 .21	60	1.44 1.79	208	4.13 5.01	855	5.38 6.10	18.30	1.00	
1	6 SEP	3.0- 3.8	1000	13.0	250	540	5.7	6	.09 .14	21	.59 .47	78	2.01 1.69	324	3.03 7.28	30.48	.70	
1	12 OCT	0.0- 3.0	1030	9.5	244	510	7.5	7	.01 -.05	28	.71 .63	96	2.12 2.99	385	6.15 6.81	41.35	.80	

LAKE 223

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAB.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
0	5 MAY	0.0-11.0	0855	8.0	143	470	1.1	11	.06 -.08	37	.69 .69	139	2.24 2.08	697	2.43 2.45	$$$$$	.60	
1	5 MAY	0.0-11.0	0855	8.0	143	470	1.1	2	1.74 .02	27	.40 .32	295	2.43 2.43	614	4.89 3.42	44.67	.60	1
0	17 MAY	0.0- 5.0	0845	10.0	46	370	1.7	11	.19 .19	38	1.27 1.29	141	3.89 3.67	847	3.83 3.85	2.06	.83	
1	17 MAY	0.0- 5.0	0845	10.0	46	370	1.7	1	.00 .08	14	.15 .17	128	2.67 2.63	589	3.58 3.34	5.74	.83	
0	18 MAY	5.0-11.0	0820	8.5	290	450	1.9	10	.76 .84	34	2.89 2.90	161	7.09 7.75	863	7.33 8.27	5.55	.72	
1	18 MAY	5.0-11.0	0820	8.5	290	450	1.9	3	.24 .07	12	-.29 .45	98	5.31 5.02	407	8.73 6.30	35.64	.72	1
0	31 MAY	0.0- 2.0	0825	18.0	23	390	1.1	12	.09 .07	41	.67 .60	158	3.46 3.56	946	4.94 4.67	8.81	1.05	
1	31 MAY	0.0- 2.0	0825	18.0	23	390	1.1	10	.00 -.01	23	.05 .10	224	2.24 2.57	1062	5.58 6.25	22.73	1.05	
0	2 JUN	2.0- 7.5	0815	12.0	50	600	4.8	8	.39 .52	27	1.64 1.78	105	6.93 8.00	581	7.31 7.33	9.23	1.50	
1	2 JUN	2.0- 7.5	0815	12.0	50	600	4.8	3	.03 .05	21	1.15 .94	106	5.06 4.63	531	5.46 5.64	15.00	1.50	
0	3 JUN	7.5-11.5	0810	8.5	207	850	8.0	6	.37 .40	19	1.85 1.67	75	7.81 7.96	432	11.03 9.72	5.88	2.60	
1	3 JUN	7.5-11.5	0810	8.5	207	850	8.0	3	.03 .02	15	1.23 1.38	81	6.83 7.88	398	8.22 9.81	13.62	2.60	
0	15 JUN	5.0- 8.0	0835	12.0	54	530	3.1	10	.18 .21	32	1.12 1.06	118	3.20 3.68	697	4.59 4.61	5.82	1.53	
1	15 JUN	5.0- 8.0	0835	12.0	54	530	3.1	7	.04 .05	25	.46 .50	146	2.69 3.39	647	4.51 4.24	9.47	1.53	
0	14 JUN	0.0- 5.0	0845	16.0	23	400	.8	13	.06 .07	45	.39 .54	173	2.01 2.33	1029	3.22 3.36	11.13	1.31	
1	14 JUN	0.0- 5.0	0845	16.0	23	400	.8	9	.08 .06	43	.26 .30	241	2.21 3.00	1029	.74 .80	6.87	1.31	1
0	16 JUN	8.0-12.0	0840	8.0	229	1080	8.0	6	.36 .33	16	2.20 1.55	73	6.61 8.93	481	7.68 8.25	13.84	2.27	
1	16 JUN	8.0-12.0	0840	8.0	229	1080	8.0	5	.00 .02	18	.74 .87	100	5.24 5.02	415	7.23 6.93	5.93	2.27	
1	29 JUN	0.0- 5.0	0855	18.5	16	470	.8	12	.01 .01	43	.16 .15	251	1.35 -10.00	963	2.25 2.05	5.91	1.42	2
1	29 JUN	0.0- 5.0	0855	18.5	81	470	.8	12	-.02 -.01	43	.17 .17	251	1.43 1.38	963	2.06 2.44	5.45	1.42	3
1	29 JUN	5.0- 9.0	0900	13.5	56	600	2.7	7	.01 .00	26	.19 .19	136	2.30 2.32	432	4.19 4.85	55.83	3.21	
1	30 JUN	9.0-12.3	0840	7.0	322	2230	31.2	6	.52 .43	28	1.55 1.63	98	12.24 12.63	349	15.29 17.85	14.94	4.36	
1	30 JUN	9.0-12.3	0840	17.0	322	2230	31.2	5	.21 .15	17	1.69 1.25	93	20.09 10.39	349	38.58 45.12	25.25	4.36	5
1	13 JUL	0.0- 5.0	0910	20.5	23	370	2.3	15	.04 .05	63	.50 .50	221	2.04 2.10	979	3.93 4.23	7.82	1.68	

LAKE 223

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-PASS	NOTE
1	13 JUL	0.0- 5.0	0910	20.5	102	370	2.3	15	-.01 .03	63	.54 .56	221	2.56 2.39	979	2.52 2.55	2.76	1.68	3
1	13 JUL	5.0-10.0	0915	14.0	82	590	3.3	6	.01 .04	23	.54 .56	77	4.47 3.20	415	16.47 11.43	40.29	3.29	
1	14 JUL	10.0-12.0	0850	7.5	364	1500	29.3	6	4.91 4.29	23	.56 .79	77	8.35 8.04	291	12.14 16.91	14.84	3.98	
1	27 JUL	0.0- 5.3	0845	23.0	15	500	2.8	16	.08 .11	73	.93 1.16	256	3.12 3.28	1096	4.41 4.74	12.74	1.97	
1	27 JUL	5.3-10.3	0840	14.5	168	1370	25.8	6	.25 .30	27	2.87 2.83	93	12.89 13.91	395	20.62 22.18	6.54	2.99	
1	28 JUL	10.3-11.0	1000	9.0	370	2450	51.6	5	.66 .84	22	4.90 3.12	75	30.99 24.01	289	35.62 54.23	23.72	6.83	
1	10 AUG	0.0- 6.5	0910	20.0	13	530	3.9	16	.09 .10	71	1.11 1.22	251	3.26 3.96	1021	6.83 6.39	8.20	2.80	
1	10 AUG	6.5-10.0	0915	14.5	108	1220	11.4	10	.45 .38	38	4.57 3.38	121	18.28 16.72	515	25.83 34.07	14.44	3.77	
1	24 AUG	0.0- 6.8	0935	20.0	14	490	8.0	21	.15 .16	87	1.86 1.45	270	6.20 5.49	1062	9.11 7.62	10.59	1.53	
1	24 AUG	6.8- 9.5	0940	15.5	139	1050	48.8	6	.10 .13	26	2.15 3.05	89	6.21 12.06	372	26.33 19.90	28.13	3.12	
1	7 SEP	0.0- 8.0	0920	16.5	23	590	3.9	17	.15 .19	65	1.69 2.41	211	8.76 3.32	848	8.19 6.41	30.88	1.40	1
1	7 SEP	8.0-10.0	0925	12.5	250	930	9.8	6	.03 .12	23	1.39 2.11	74	5.02 4.88	314	5.86 9.05	38.36	1.64	
1	21 SEP	0.0- 9.0	0940	14.0	36	690	5.1	13	.16 .16	54	1.85 1.63	184	7.35 7.66	702	9.78 10.33	4.46	1.35	
1	21 SEP	9.0-10.0	0945	11.0	253	1380	12.2	6	.37 .05	23	2.06 1.64	76	5.92 9.28	309	6.71 14.36	52.24	2.48	
1	28 SEP	0.0-10.0	1150	12.0	46	680	6.8	5	.04 .04	22	.82 .71	89	3.99 3.70	387	7.51 8.07	4.95	1.37	
1	12 OCT	0.0- 8.0	0915	9.5	51	630	8.1	7	.09 .11	28	1.09 1.25	96	4.65 4.19	385	8.89 8.29	9.16	1.24	
1	27 OCT	0.0- 8.0	0930	7.8	41	780	6.8	8	.24 .27	34	1.37 1.41	120	4.59 4.69	480	6.49 6.06	4.16	1.15	

LAKE 224

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIG-MASS	NOTE
0	17 MAY	0.0- 6.0	0910	10.0	97	430	1.1	11	.07 .07	38	.71 .71	141	2.27 2.35	847	2.63 2.69	1.01	.77	
1	17 MAY	0.0- 6.0	0910	10.0	97	430	1.1	1	-.02 .00	14	.06 .09	128	1.80 1.99	589	1.89 2.19	14.58	.77	
0	18 MAY	6.0-20.0	0840	8.5	164	500	2.7	10	.39 .37	34	2.15 1.79	161	4.72 4.59	863	4.73 4.91	5.41	1.08	
1	18 MAY	6.0-20.0	0840	8.5	164	500	2.7	3	.00 .02	12	.31 .38	98	3.50 3.73	407	4.71 4.37	37.26	1.08	
0	14 JUN	0.0- 5.5	0915	16.0	79	450	1.2	13	.03 .06	45	.56 .45	173	1.97 2.10	1029	2.52 2.28	16.78	1.25	
1	14 JUN	0.0- 5.5	0915	16.0	79	450	1.2	9	.00 .00	43	.26 .32	241	1.56 1.73	1029	1.79 2.09	15.00	1.25	
0	15 JUN	5.5- 9.0	0855	12.0	86	490	2.1	10	.06 .05	32	.46 .47	118	2.23 1.92	697	2.52 2.45	6.14	1.51	
1	15 JUN	5.5- 9.0	0855	12.0	86	490	2.1	7	.00 .02	25	.29 .23	146	1.83 1.90	647	2.22 2.31	30.58	1.51	
0	16 JUN	9.0-20.0	0820	8.0	188	620	4.9	6	.40 .33	16	1.03 .94	73	2.75 2.73	481	3.18 3.33	6.04	1.57	
1	16 JUN	9.0-20.0	0820	8.0	188	620	4.9	5	.09 .10	18	.61 .55	100	2.16 2.70	415	2.96 3.11	8.95	1.57	
1	13 JUL	0.0- 5.5	0945	20.5	83	420	1.3	15	-.02 .00	63	.21 .26	221	1.45 1.50	979	2.46 2.59	7.22	1.05	
1	13 JUL	5.5-11.0	0950	14.0	98	450	1.9	6	.02 -.01	23	.20 .10	77	.75 .75	415	2.30 2.30	147.86	.94	
1	14 JUL	11.0-19.0	0915	7.5	176	670	6.4	6	.07 .08	23	.86 .93	77	2.74 3.00	291	3.82 3.96	5.29	7.41	
1	10 AUG	0.0- 7.0	1000	20.0	92	470	1.5	16	.02 .08	71	.33 .24	251	1.71 1.84	1021	1.26 2.38	38.03	.89	
1	10 AUG	7.0-11.0	1005	14.5	84	550	2.4	10	.03 .01	38	.42 .31	121	.56 1.63	515	2.78 2.59	48.62	.93	
1	11 AUG	11.0-18.0	0830	10.0	178	870	5.3	6	.19 .25	23	1.00 1.41	82	3.45 2.98	349	8.15 7.27	15.96	.91	5
1	11 AUG	11.0-18.0	0830	8.0	178	870	5.3	7	.08 .00	26	1.25 1.27	89	4.00 3.93	349	3.97 3.03	37.46	.91	
1	7 SEP	0.0- 8.5	0845	16.5	85	450	1.0	17	.02 -.00	65	.32 .38	211	1.34 1.35	848	1.69 .64	68.66	.75	1
1	7 SEP	8.5-12.0	0850	12.5	90	930	9.8	6	-.03 -.05	23	.23 .35	74	1.15 .54	314	2.73 2.84	28.01	1.64	
1	8 SEP	12.0-17.0	0900	10.0	200	920	5.9	5	.07 .06	21	.94 1.03	71	3.49 3.41	283	5.20 5.81	6.14	1.39	
1	8 SEP	12.0-17.0	0900	10.0	200	920	5.9	7	.12 .16	26	1.44 1.47	86	4.18 4.17	283	5.75 5.64	6.17	1.39	
1	12 OCT	0.0-13.0	1000	9.5	86	500	3.3	7	.03 .05	28	.53 .49	96	1.75 1.93	385	2.63 2.74	14.29	.82	
1	12 OCT	13.0-18.0	1000	9.5	268	570	8.0	7	.54 .44	28	2.09 1.55	96	4.05 4.25	385	4.48 4.32	10.15	.91	

LAKE 226 NE

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
0	10 MAY	0.0- 2.5	1035	10.0	178	740	6.0	13	.54 .55	40	2.91 3.26	159	12.40 9.47	830	10.22 10.29	7.18	2.66	
1	10 MAY	0.0- 2.5	1035	10.0	178	740	6.0	3	-.01 -.03	36	1.94 1.59	374	14.82 10.77	913	12.78 12.60	12.52	2.66	
0	11 MAY	2.5- 4.0	0955	8.0	189	840	7.8	12	1.39 1.32	41	5.85 5.74	133	14.09 14.64	880	14.00 13.78	2.20	2.94	
1	11 MAY	2.5- 4.0	0955	8.0	189	840	7.8	3	.10 -.03	37	2.97 3.74	367	12.46 12.52	896	9.95 10.10	71.57	2.94	
0	12 MAY	4.0- 8.3	1005	6.5	315	-10	5.3	8	.55 .54	25	2.37 2.20	93	6.09 6.24	440	7.20 7.11	2.23	1.17	2
1	12 MAY	4.0- 8.3	1005	6.5	315	-10	5.3	1	.01 -.03	15	1.47 1.16	179	8.78 7.55	370	8.57 6.44	58.90	1.17	2
0	7 JUN	0.0- 2.3	1015	17.0	162	770	2.2	10	.17 .17	35	1.47 1.58	135	7.25 7.40	830	11.62 11.28	2.43	1.74	
1	7 JUN	0.0- 2.3	1015	17.0	162	770	2.2	6	-.06 .01	37	1.07 1.02	183	7.13 8.06	863	7.39 8.16	6.34	1.74	
0	8 JUN	2.3- 6.0	0920	11.0	157	1110	12.9	8	1.81 1.25	24	4.82 4.76	100	14.43 13.94	564	16.79 16.45	7.68	4.67	
1	8 JUN	2.3- 6.0	0920	11.0	157	1110	12.9	4	.09 .14	20	2.69 2.77	111	11.84 10.90	531	12.02 11.21	11.51	4.67	
0	9 JUN	6.0- 7.5	0855	7.0	347	800	7.8	4	1.04 .68	17	2.87 3.61	75	7.43 6.87	432	7.72 8.15	13.80	1.91	
1	9 JUN	6.0- 7.5	0855	7.0	347	800	7.8	2	-.10 -.12	13	1.73 1.63	73	6.86 6.36	398	6.28 6.22	3.50	1.91	
1	6 JUL	0.0- 2.8	0845	19.0	129	1170	4.9	18	.15 .12	70	2.43 2.67	232	9.31 9.43	979	11.33 10.06	7.14	2.42	
1	6 JUL	2.8- 7.5	0850	13.0	238	1290	12.9	7	.42 .36	26	2.57 2.87	83	9.71 10.38	319	16.41 16.54	6.31	4.27	
1	2 AUG	0.0- 3.8	1110	20.5	120	820	4.5	16	-.01 -.04	70	1.25 1.47	254	7.10 6.84	1117	7.99 3.45	23.49	2.82	
1	2 AUG	3.8- 7.0	1120	13.0	285	1130	13.4	7	.56 .73	31	3.80 3.53	107	11.82 10.13	422	13.97 13.36	9.29	2.87	
1	30 AUG	0.0- 4.5	1030	16.0	131	790	5.0	11	.19 .02	46	1.11 1.23	160	4.63 5.13	707	6.71 7.00	31.86	2.28	
1	30 AUG	4.5- 7.5	1035	12.0	326	1140	11.4	5	.44 .57	21	3.09 2.90	75	9.69 9.98	299	13.67 13.20	6.76	4.81	
1	27 SEP	0.0- 6.0	1115	13.0	147	840	4.6	7	.03 .05	29	.77 .93	103	3.24 3.95	412	7.08 6.06	17.68	1.85	
1	27 SEP	6.0- 7.5	1120	9.0	349	1270	23.2	5	.14 .13	19	2.30 2.29	62	9.61 9.95	248	15.08 16.56	3.08	1.65	
1	27 OCT	0.0- 6.0	0845	7.8	185	1160	10.8	8	.36 .42	34	2.72 2.65	120	10.35 9.87	480	13.36 14.56	5.91	5.03	

LAKE 226 SW

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	M/TE
0	10 MAY	0.0- 3.0	1020	10.0	187	650	5.3	13	.41 2.60	40	2.04 7.09	159	7.10 8.56	830	8.84 -10.00	64.82	1.85	2
1	10 MAY	0.0- 3.0	1020	10.0	187	650	5.3	3	-.02 .06	36	1.90 1.25	374	9.10 9.08	913	1.51 1.62	11.45	1.85	1
0	11 MAY	3.0- 4.3	0945	8.0	242	870	6.1	13	1.02 .98	41	3.98 3.93	133	8.23 9.20	880	8.24 8.30	3.11	1.69	
1	11 MAY	3.0- 4.3	0945	8.0	242	870	6.1	3	.06 .01	37	2.11 2.40	367	8.14 7.28	896	6.46 6.89	32.14	1.69	
0	12 MAY	4.3- 8.0	0955	6.5	228	800	5.1	8	.36 .31	25	1.60 1.66	93	4.68 5.06	440	4.37 4.89	6.86	1.55	
1	12 MAY	4.3- 8.0	0955	6.5	228	800	5.1	1	.55 -.02	15	.46 .63	179	3.73 3.90	370	4.75 4.97	44.41	1.55	
0	7 JUN	0.0- 2.0	1000	17.0	163	800	3.7	10	.26 .17	35	1.95 2.05	135	8.50 8.35	830	11.41 11.77	9.22	3.42	
1	7 JUN	0.0- 2.0	1000	17.0	163	800	3.7	6	-.04 -.06	37	1.28 1.47	183	9.44 8.75	863	10.23 10.49	5.67	3.42	
0	8 JUN	2.0- 6.0	0910	11.0	179	910	5.8	8	.61 .75	24	3.23 3.71	180	12.07 10.72	564	11.62 11.69	8.29	2.93	
1	8 JUN	2.0- 6.0	0910	11.0	179	910	5.8	4	.20 .21	20	2.07 2.31	111	9.48 12.47	531	11.38 11.49	7.39	2.93	
0	9 JUN	6.0- 8.0	0845	7.0	375	740	6.6	4	.59 .75	17	2.30 2.32	75	6.40 5.85	432	5.98 5.82	6.72	3.35	
1	9 JUN	6.0- 8.0	0845	7.0	375	740	6.6	2	.03 -.10	13	1.35 1.38	73	5.93 5.76	398	5.35 5.12	57.19	3.35	
1	6 JUL	0.0- 2.5	0820	19.0	131	840	5.2	18	.03 -.02	70	2.12 1.82	232	8.02 7.79	979	10.02 9.79	97.85	2.48	
1	6 JUL	2.5- 7.5	0825	13.0	235	1050	14.8	7	.36 .36	26	2.20 2.47	83	7.39 9.23	319	13.73 16.51	9.51	5.26	
1	2 AUG	0.0- 3.5	1050	20.5	123	610	5.3	16	.15 .13	70	1.74 1.94	254	6.79 6.46	1117	7.52 7.60	5.71	3.80	
1	2 AUG	3.5- 7.8	1055	13.0	314	970	19.0	7	.58 .73	31	3.86 3.69	187	11.85 11.87	422	16.43 15.59	5.90	5.25	
1	30 AUG	0.0- 4.5	1010	16.0	124	720	4.1	11	.11 .12	46	1.04 .93	160	4.04 3.99	787	5.50 5.39	3.18	2.66	
1	30 AUG	4.5- 7.5	1015	12.0	334	1310	22.8	5	.35 .36	21	3.76 3.59	75	12.78 11.59	299	14.50 16.73	5.99	5.46	
1	27 SEP	0.0- 5.5	1035	13.0	137	670	3.4	7	-.07 -.01	29	.38 .46	103	1.88 1.40	412	4.06 3.22	16.89	4.60	
1	27 SEP	5.5- 7.5	1100	9.0	356	1130	23.1	5	.01 .07	19	1.73 1.66	62	7.53 7.11	248	6.95 10.70	37.74	3.76	
1	27 OCT	0.0- 6.0	0835	7.8	211	940	9.3	8	.23 .29	34	1.96 2.05	120	5.17 5.49	480	7.37 6.96	6.60	2.16	

LAKE 227

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAP..	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIC-PPSS	NOTE
0	5 MAY	0.0- 2.0	1005	8.0	256	1660	10.9	11	1.81 1.35	37	5.76 6.77	139	16.60 18.65	697	18.98 19.74	10.75	7.98	
1	5 MAY	0.0- 2.0	1005	8.0	256	1660	10.9	2	1.34 -.02	27	2.39 2.45	295	13.85 18.62	614	19.06 19.43	42.40	7.98	
0	17 MAY	0.0- 2.0	1110	10.0	190	1420	13.8	11	2.05 -10.00	38	8.83 9.54	141	17.81 19.20	847	17.60 16.67	4.87	12.66	2
1	17 MAY	0.0- 2.0	1110	10.0	190	1420	13.8	1	.01 .18	14	2.44 1.95	128	16.58 17.05	589	18.77 17.80	34.31	12.66	
0	18 MAY	2.0- 4.0	1005	8.5	364	1880	13.8	10	3.03 3.34	34	11.99 11.36	161	19.87 21.03	863	27.10 28.43	4.52	12.66	
1	18 MAY	2.0- 4.0	1005	8.5	364	1880	13.8	3	.34 .43	12	2.86 2.98	98	19.57 24.87	407	22.18 22.73	9.51	12.66	
0	31 MAY	0.0- 1.3	1040	18.0	137	1880	10.3	12	.60 1.09	41	5.08 5.36	158	14.01 15.86	946	20.70 20.24	13.79	13.68	
1	31 MAY	0.0- 1.3	1040	18.0	137	1880	10.3	10	1.14 1.35	23	1.74 1.57	224	16.80 19.04	1062	19.44 14.84	10.83	13.68	
0	2 JUN	1.3- 4.0	1025	12.0	235	2710	32.5	8	5.65 3.12	27	13.86 16.17	105	35.47 24.76	581	48.58 34.73	21.95	18.80	
1	2 JUN	1.3- 4.0	1025	12.0	235	2710	32.5	3	1.24 .95	21	10.05 8.55	106	32.65 34.93	531	30.01 26.36	11.00	18.80	
0	14 JUN	0.0- 1.0	1055	16.0	142	1340	4.3	13	.51 .53	45	4.15 3.88	173	8.50 12.22	1029	15.93 15.81	8.35	4.96	
1	14 JUN	0.0- 1.0	1055	16.0	142	1340	4.3	9	-.30 -.36	43	3.66 3.66	241	6.72 8.33	1029	9.04 11.41	10.51	4.96	
0	15 JUN	1.0- 3.5	1050	12.0	166	2340	25.3	10	1.82 1.47	32	6.57 6.73	118	18.64 15.14	697	18.71 16.68	7.88	11.65	
1	15 JUN	1.0- 3.5	1050	12.0	166	2340	25.3	7	.86 .45	25	4.62 4.52	146	18.52 18.66	647	20.64 17.91	14.24	11.65	
1	29 JUN	0.0- 1.5	1010	18.5	139	1670	8.8	12	.86 .16	43	1.18 1.45	251	11.73 12.11	963	16.30 18.21	22.22	56.13	
1	29 JUN	1.5- 3.5	1015	13.5	167	2740	21.2	7	.17 .20	28	2.78 2.15	136	17.90 16.27	432	19.64 18.74	9.90	16.20	
1	12 JUL	0.0- 1.0	1010	21.0	65	2840	29.5	15	.99 1.26	66	12.22 13.41	232	45.86 53.25	963	66.31 78.15	10.05	58.19	
1	12 JUL	0.0- 1.0	1010	21.0	127	2840	29.5	15	.56 .74	66	12.00 11.04	232	48.30 43.92	963	67.61 67.28	8.13	58.19	3
1	12 JUL	1.0- 3.3	1015	14.0	137	1310	28.6	6	.53 .95	24	3.96 3.96	78	17.78 16.41	297	32.64 -10.00	15.16	21.88	2
1	26 JUL	0.0- 2.5	0930	22.0	77	4360	63.1	14	5.84 5.51	63	38.43 40.13	224	118.08 132.35	941	154.56 145.94	4.82	77.92	
1	28 JUL	0.0- .3	0815	23.0	29	6700	52.7	17	7.36 7.90	76	91.95 95.96	269	325.69 320.24	1121	323.99 328.27	2.43	87.09	
1	28 JUL	0.0- .3	0815	23.0	34	6700	52.7	17	9.28 8.93	76	90.80 98.79	269	345.21 333.78	1121	366.49 393.65	4.03	87.09	4
1	28 JUL	0.0- .3	0815	23.0	114	6700	52.7	17	6.99 6.43	76	83.92 81.57	269	288.48 301.47	1121	335.32 346.78	3.36	87.09	3

LAKE 227

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	3 AUG	0.0- .3	0820	23.0	52	5560	80.2	14	3.40 2.76	55	48.43 44.07	191	186.12 192.78	797	289.11 257.46	8.01	113.75	
1	9 AUG	0.0- 1.3	0940	19.5	94	5080	38.7	15	5.98 7.83	61	48.56 54.86	211	157.95 155.61	896	165.87 150.49	9.11	63.68	
1	23 AUG	0.0- 1.3	1025	19.5	39	5650	103.6	20	11.64 12.09	79	85.42 87.41	264	214.57 211.62	929	227.54 225.84	1.45	82.42	
1	6 SEP	0.0- 1.5	0900	15.0	70	5750	89.6	15	7.49 6.85	60	38.13 37.65	208	116.66 123.19	855	93.67 122.25	7.44	65.38	
1	16 SEP	0.0- .3	0930	14.0	114	-10	-10.0	13	4.77 5.26	47	35.51 35.78	160	106.96 105.58	637	131.05 137.80	2.98	-10.00	2
1	20 SEP	0.0- 1.8	1015	13.5	120	4230	75.1	11	3.20 3.04	42	21.40 22.65	153	66.50 49.82	603	80.12 -10.00	9.31	40.15	2
1	28 SEP	0.0- 2.8	1100	12.0	199	2570	29.4	5	.42 .46	22	8.26 7.20	89	34.77 30.80	387	52.68 51.72	6.50	22.11	
1	13 OCT	0.0- 3.5	0845	8.5	281	1650	16.7	6	1.08 1.50	26	7.66 7.02	94	16.82 16.94	392	29.51 29.05	7.70	11.67	
1	25 OCT	0.0- 3.0	1110	7.5	390	3410	33.3	11	1.62 1.30	48	8.90 7.67	171	22.38 21.40	674	29.99 31.16	7.97	19.77	

LAKE 239

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-PASS	NOTE
0	5 MAY	0.0- 8.5	0935	8.0	184	430	1.6	11	.05 .10	37	.85 .76	139	2.74 2.94	697	3.81 3.37	17.17	.58	
1	5 MAY	0.0- 8.5	0935	8.0	184	430	1.6	2	.07 .05	27	.71 .63	295	3.48 2.85	614	3.14 3.58	13.84	.58	
0	17 MAY	0.0- 6.0	0910	10.0	142	510	2.6	11	.52 .52	38	1.79 1.68	141	4.61 5.16	847	4.59 5.73	7.02	1.23	
1	17 MAY	0.0- 6.0	0910	10.0	142	510	2.6	1	.34 .74	14	.62 .45	128	4.27 3.59	589	4.73 5.90	25.66	1.23	
0	18 MAY	6.0- 8.5	0925	8.5	165	350	1.9	10	.33 .28	34	1.30 1.50	161	2.88 3.13	863	3.03 2.83	8.10	.62	
1	18 MAY	6.0- 8.5	0925	8.5	165	350	1.9	3	-.01 .02	12	.19 .22	98	2.30 2.35	407	2.98 3.06	4.58	.62	
0	31 MAY	0.0- 2.3	1020	18.0	131	480	1.7	12	.42 -.04	41	.65 1.25	158	3.80 3.61	946	3.31 4.00	58.21	2.45	
1	31 MAY	0.0- 2.3	1020	18.0	131	480	1.7	10	.03 -.01	23	.15 .16	224	2.87 2.79	1062	4.38 4.02	73.87	2.45	
0	2 JUN	2.3- 6.0	0920	12.0	121	570	5.1	8	.36 .40	27	1.80 1.82	105	4.53 5.02	581	5.59 4.90	6.20	2.21	
1	2 JUN	2.3- 6.0	0920	12.0	121	570	5.1	3	.06 .07	21	1.17 1.01	106	3.96 3.65	531	3.98 4.25	7.91	2.21	
0	3 JUN	6.0- 8.5	0840	8.5	165	510	10.8	6	.54 .65	19	2.18 2.27	75	4.91 4.63	432	5.47 5.65	5.59	1.63	
1	3 JUN	6.0- 8.5	0840	8.5	165	510	10.8	3	.22 .22	15	1.68 1.59	81	5.68 5.56	398	4.34 3.91	2.33	1.63	
0	14 JUN	0.0- 5.0	1010	16.0	121	430	2.1	13	.07 .06	45	.71 .68	173	2.64 2.68	1029	3.16 3.13	3.92	1.71	
1	14 JUN	0.0- 5.0	1010	16.0	121	430	2.1	9	.04 -.12	43	.12 -.12	241	2.27 1.76	1029	2.17 2.04	$$$$$	1.71	1
0	15 JUN	5.0- 8.5	1000	12.0	160	600	8.0	10	.98 .80	32	3.63 3.20	118	9.57 7.22	697	7.51 8.91	13.76	2.82	
1	15 JUN	5.0- 8.5	1000	12.0	160	600	8.0	7	.17 .14	25	1.99 2.10	146	8.76 7.74	647	8.64 6.52	11.50	2.82	
1	29 JUN	0.0- 4.0	0930	18.5	131	380	1.9	12	.16 .14	43	.41 .45	251	2.15 2.16	963	3.26 1.74	14.83	.90	
1	29 JUN	4.0- 8.5	1135	13.5	132	900	9.0	7	.02 .04	26	1.42 1.46	136	6.09 5.64	432	6.07 5.01	17.01	2.53	
1	12 JUL	0.0- 5.0	0940	21.0	134	380	2.8	15	.69 .62	66	1.28 1.34	232	2.99 4.72	963	4.53 5.51	14.08	.84	
1	12 JUL	5.0- 9.0	0950	14.0	187	480	11.3	6	.19 .17	24	1.90 1.92	78	5.05 6.87	297	7.13 6.17	10.10	2.10	
1	27 JUL	0.0- 4.3	0935	23.0	119	460	2.4	16	.09 .11	73	.98 .96	256	3.21 3.14	1096	3.96 3.64	5.78	.76	
1	27 JUL	4.3- 7.5	0940	14.5	142	680	12.5	6	.25 .22	27	2.05 2.13	93	4.62 5.29	396	5.71 7.64	10.43	2.88	
1	9 AUG	0.0- 5.0	0920	19.5	126	380	3.0	14	-.29 -.37	61	.79 .92	211	3.59 2.78	896	3.78 3.76	9.70	1.17	
1	9 AUG	5.0- 7.5	0925	13.5	159	770	14.3	9	.47 .39	32	1.81 1.81	109	4.50 5.16	432	5.58 6.02	7.05	2.77	

LAKE 239

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOP A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-PASS	NCTE
1	11 AUG	8.0- 8.0	0950	18.0	254	500	5.3	6	.05 .25	23	1.32 1.18	82	4.25 3.95	349	5.60 5.38	27.48	2.16	5
1	11 AUG	8.0- 8.0	0950	8.0	254	500	5.3	7	.24 .29	26	1.45 1.50	89	3.04 2.65	349	2.70 2.62	6.89	2.16	
1	23 AUG	0.0- 4.8	0955	19.5	132	450	3.7	22	-.13 -.04	86	.95 1.25	291	3.47 3.80	1021	4.19 3.42	13.34	.96	
1	23 AUG	4.8- 7.0	1005	15.5	155	540	8.6	6	.07 .01	25	.81 .89	93	2.83 2.97	384	4.32 4.81	30.93	1.77	
1	6 SEP	0.0- 7.0	0945	15.0	132	430	3.7	15	-.23 -.17	60	.80 .57	208	2.41 2.23	855	.75 2.43	34.65	1.19	1
1	6 SEP	7.0- 8.0	0950	13.0	213	570	6.3	6	.24 .24	23	.89 .86	78	3.05 2.89	324	4.36 4.56	2.35	1.43	
1	20 SEP	0.0- 8.3	1010	13.5	143	460	3.0	11	-.68 -.69	42	.48 .54	153	2.05 2.13	603	3.65 1.59	22.21	1.22	1
1	28 SEP	0.0- 8.5	1000	12.0	148	450	3.4	5	.21 .13	22	.57 .60	89	2.67 2.46	387	4.83 5.42	12.71	1.30	
1	11 OCT	0.0- 8.0	1125	9.8	153	520	5.4	8	.06 0.00	29	.72 .89	105	2.79 2.98	420	4.70 4.55	40.83	1.09	
1	26 OCT	0.0- 7.5	1015	7.5	158	480	4.0	12	.17 .15	48	1.11 1.08	171	3.24 3.41	729	3.56 3.10	6.04	1.26	

LAKE 302 N

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
0	4 MAY	0.0- 9.0	0925	8.0	181	850	6.8	10	.52 .54	41	3.27 2.68	153	8.12 8.61	733	9.37 10.11	6.44	.73	
1	4 MAY	0.0- 9.0	0925	8.0	181	850	6.8	2	-.01 -.00	29	1.40 1.60	307	7.52 8.07	548	9.02 8.69	5.79	.73	
0	10 MAY	0.0- 3.5	0810	10.0	85	790	2.8	13	.65 .61	40	3.32 3.15	159	8.39 7.79	830	10.58 9.38	5.51	2.71	
1	10 MAY	0.0- 3.5	0810	10.0	85	790	2.8	3	.07 .06	36	1.72 2.09	374	9.95 13.06	913	10.58 10.51	10.18	2.71	
0	11 MAY	3.3- 6.0	0830	8.0	142	810	7.1	13	1.27 1.46	41	5.24 4.60	133	10.19 9.08	880	8.56 9.29	8.20	1.77	
1	11 MAY	3.3- 6.0	0830	8.0	142	810	7.1	3	.09 .11	37	3.13 3.21	367	10.14 10.33	896	7.68 9.97	8.78	1.77	
0	12 MAY	6.0- 8.3	0830	6.5	230	880	3.2	8	.65 1.91	25	3.28 2.60	93	6.46 4.91	440	5.82 5.70	26.67	1.34	
1	12 MAY	6.0- 8.3	0830	6.5	230	880	3.2	1	-.05 -.02	15	1.12 1.19	179	6.29 5.98	370	6.38 5.84	4.79	1.34	
0	24 MAY	0.0- 2.0	0840	15.5	61	3280	2.0	13	.10 .12	43	.95 .96	158	3.83 4.10	913	-10.00 3.33	6.65	1.96	2
1	24 MAY	0.0- 2.0	0840	15.5	61	3280	2.0	5	.00 -.01	21	.13 .15	208	3.38 3.26	847	4.93 5.29	52.94	1.96	
0	25 MAY	2.0- 6.0	0820	11.0	82	1020	5.0	9	.21 .25	27	1.53 1.65	98	5.20 6.67	548	7.67 8.53	10.11	3.71	
1	25 MAY	2.0- 6.0	0820	11.0	82	1020	5.0	4	.02 .03	15	.59 .49	120	4.56 4.79	498	8.34 4.89	13.31	3.71	
0	27 MAY	6.0- 7.5	0750	7.5	235	760	7.6	7	.80 .87	23	2.74 3.03	86	9.09 8.80	437	9.61 8.77	5.43	2.55	
1	27 MAY	6.0- 7.5	0750	7.5	235	760	7.6	3	.06 .06	11	.97 1.03	105	8.02 7.12	457	7.75 9.90	7.43	2.55	
0	7 JUN	0.0- 3.0	0815	17.0	100	560	1.4	10	.17 .37	35	1.86 2.06	135	8.94 7.04	830	12.42 11.39	20.68	1.63	
1	7 JUN	0.0- 3.0	0815	17.0	100	560	1.4	6	.06 .09	37	1.14 1.29	183	7.28 7.28	863	8.94 9.00	8.58	1.63	
0	8 JUN	3.0- 6.0	0810	11.0	100	750	5.9	8	.56 .69	24	2.84 2.20	100	7.12 8.26	564	8.01 9.02	13.03	1.80	
1	8 JUN	3.0- 6.0	0810	11.0	100	750	5.9	4	.14 .17	20	1.07 1.10	111	6.55 6.41	531	6.66 5.36	7.49	1.80	
0	9 JUN	6.0- 7.5	0755	7.0	364	770	10.8	4	.90 1.04	17	2.63 2.79	75	5.87 5.21	432	9.94 10.36	6.46	2.75	
1	9 JUN	6.0- 7.5	0755	7.0	363	770	10.8	2	.25 .04	13	2.14 2.38	73	10.15 8.80	398	9.17 8.84	30.56	2.75	
1	21 JUN	0.0- 3.5	0845	17.0	51	760	1.7	12	.14 .08	47	.51 .65	257	3.75 3.70	1096	2.96 3.53	17.03	1.75	
1	22 JUN	3.5- 7.0	0840	12.0	135	840	7.6	8	.33 .32	28	2.34 2.12	151	9.55 9.19	647	10.09 9.64	3.24	2.27	
1	23 JUN	7.0- 8.0	0800	8.0	326	948	16.8	3	.82 .70	12	2.24 2.23	63	9.92 10.04	241	17.47 17.23	3.27	1.93	
1	5 JUL	0.0- 4.0	0840	19.5	47	810	8.0	15	.42 .38	60	3.44 2.84	191	12.78 10.74	930	14.67 15.45	13.02	2.23	

LAKE 302 N

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAP.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	5 JUL	4.0- 8.0	0845	13.0	204	1120	23.0	7	.63 .62	28	3.96 3.23	90	15.67 9.00	349	20.65 16.83	17.06	2.40	
1	19 JUL	0.0- 3.8	0815	20.5	35	880	6.8	13	.28 .28	53	2.41 3.15	208	9.70 11.86	913	13.85 14.91	9.94	1.90	
1	19 JUL	0.0- 3.8	0815	20.5	110	880	6.8	13	.34 .36	53	2.93 3.09	208	10.28 9.61	913	12.60 11.51	4.69	1.90	
1	19 JUL	3.8- 7.8	0820	14.0	214	940	12.8	8	.51 .43	34	2.79 2.98	115	7.97 7.82	448	10.50 11.59	6.28	1.76	3
1	4 AUG	0.0- 4.0	0830	23.0	24	880	8.9	12	.14 .13	48	2.44 2.52	181	8.43 8.18	767	12.04 11.99	2.49	-10.00	2
1	2 AUG	4.0- 7.5	0836	13.0	215	1020	17.2	7	.63 .63	31	3.81 3.67	107	10.29 12.89	422	16.58 15.68	5.65	4.10	
1	16 AUG	0.0- 4.0	0935	22.0	29	690	4.8	18	.19 .14	71	1.59 1.65	242	4.80 4.83	896	7.06 6.13	8.94	1.99	
1	16 AUG	4.0- 7.5	0940	16.0	207	1220	15.5	17	.61 .47	41	3.69 4.49	133	11.24 11.32	531	13.98 13.76	8.29	3.61	
1	30 AUG	0.0- 5.0	0815	16.0	38	730	6.0	11	.15 .18	46	1.33 1.25	160	3.48 4.34	707	5.53 4.97	10.21	2.19	
1	30 AUG	5.0- 7.5	0820	12.0	274	1450	21.8	5	.24 .34	21	1.97 2.21	75	9.33 11.14	299	13.84 13.90	11.45	3.61	
1	13 SEP	0.0- 4.0	0940	17.5	31	780	11.8	13	.06 .04	47	1.25 1.08	161	4.28 2.28	633	6.86 7.23	18.14	1.93	
1	13 SEP	4.0- 7.8	0945	13.0	200	1120	21.6	5	.11 .12	19	1.98 1.77	65	9.73 7.77	264	13.30 16.86	10.77	2.63	
1	11 OCT	0.0- 7.0	0950	9.8	74	810	15.9	8	.30 .23	29	1.65 1.52	105	10.36 6.29	420	13.57 14.44	15.41	3.21	
1	26 OCT	0.0- 6.0	0845	7.5	91	980	12.1	12	.43 .50	48	2.47 2.77	171	8.29 8.56	729	9.14 10.15	6.74	2.43	
1	27 SEP	0.0- 7.3	0900	13.0	56	890	11.2	7	.14 .15	29	1.24 1.44	103	6.90 8.12	412	13.54 15.16	9.05	4.15	

LAKE 302 S

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
0	4 MAY	0.0- 8.0	0950	8.0	205	700	1.7	10	-10.00 .08	41	.82 .86	153	3.19 2.79	733	2.93 3.85	10.60	1.54	2
1	4 MAY	0.0- 8.0	0950	8.0	205	700	1.7	2	.11 .11	29	.47 .51	307	2.90 2.93	548	3.10 2.98	3.69	1.54	
0	10 MAY	0.0- 3.5	0830	10.0	130	490	1.5	13	.16 .16	40	1.07 1.16	159	3.09 3.40	830	4.32 5.18	7.07	.99	
1	10 MAY	0.0- 3.5	0830	10.0	130	490	1.5	3	-.02 -.03	36	.46 .54	374	4.29 3.45	913	3.68 3.61	9.36	.99	
0	11 MAY	3.5- 5.3	0840	8.0	199	600	3.3	13	.50 .42	41	2.01 2.09	133	4.30 4.64	880	5.36 5.06	6.16	1.92	
1	11 MAY	3.5- 5.3	0840	8.0	199	600	3.3	3	.04 .07	37	1.22 1.16	367	5.69 6.03	896	2.23 2.93	18.32	1.62	1
0	12 MAY	5.3- 8.0	0840	6.5	201	750	2.7	8	.23 .20	25	1.09 1.05	93	3.21 2.96	440	3.53 3.24	6.53	1.32	
1	12 MAY	5.3- 8.0	0840	6.5	201	750	2.7	1	.23 .20	15	1.09 1.05	179	3.21 2.96	370	3.53 2.24	12.93	1.30	
0	24 MAY	0.0- 2.0	0855	15.5	72	420	1.0	13	.03 .02	43	.42 .39	158	1.73 1.73	913	2.41 3.16	9.23	.84	
1	24 MAY	0.0- 2.0	0855	15.5	72	420	1.0	5	.00 .03	21	.09 .08	208	1.71 1.80	847	2.64 2.76	33.75	.84	
0	25 MAY	2.0- 6.0	0835	11.0	132	560	2.0	9	.09 .16	27	.63 .65	98	2.43 2.59	548	3.36 3.50	11.62	1.56	
1	25 MAY	2.0- 6.0	0835	11.0	132	560	2.0	4	-.00 -.01	15	.14 .19	120	1.81 2.24	498	2.71 2.84	13.06	1.56	
0	27 MAY	6.0- 8.0	0800	7.5	285	760	4.0	8	.21 .21	23	1.34 1.52	86	4.96 3.96	437	6.48 6.32	6.65	1.30	
1	27 MAY	6.0- 8.0	0800	7.5	285	760	4.0	3	.03 .03	11	.43 .44	105	4.39 4.02	457	4.04 5.33	9.82	1.30	
0	7 JUN	0.0- 3.0	0830	17.0	106	490	1.4	10	.15 13	35	.97 .97	135	4.93 4.45	830	7.06 7.69	5.03	1.13	
1	7 JUN	0.0- 3.0	0830	17.0	106	490	1.4	6	.02 .02	37	.95 .71	183	4.98 5.61	863	5.64 5.62	10.47	1.13	
0	8 JUN	3.0- 6.0	0820	11.0	127	720	5.2	8	.39 .42	24	2.17 2.22	100	7.11 7.46	564	9.57 9.37	3.29	1.46	
1	8 JUN	3.0- 6.0	0820	11.0	127	720	5.2	4	.05 .06	20	1.29 1.36	111	6.11 6.78	531	6.92 7.00	7.04	1.46	
0	9 JUN	6.0- 8.0	0805	7.0	310	840	5.3	4	.39 .35	17	1.84 1.84	75	7.11 6.98	432	7.04 7.32	2.90	1.64	
1	9 JUN	6.0- 8.0	0805	7.0	310	840	5.3	2	-.01 .27	13	1.16 1.12	73	6.53 6.86	398	6.24 6.97	4.76	1.64	
1	21 JUN	0.0- 4.0	0900	17.0	65	860	2.3	12	.06 .03	47	.54 .57	257	2.72 3.16	1096	3.53 3.17	15.20	1.44	
1	22 JUN	4.0- 7.0	0820	12.0	161	910	8.5	8	.23 .12	28	1.59 1.86	151	14.46 15.16	647	12.09 9.97	17.73	3.72	
1	23 JUN	7.0- 8.5	0810	8.0	352	1130	11.5	3	.02 .17	12	1.17 1.29	63	7.31 10.87	241	11.67 12.49	38.78	4.77	
1	5 JUL	0.0- 4.0	0905	19.5	57	750	6.0	15	.21 .22	60	1.15 1.94	191	6.79 8.17	930	7.56 8.48	15.49	2.05	

LAKE 302 S

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	5 JUL	4.0- 8.3	0910	13.0	182	1520	20.7	7	.23 .31	28	1.90 1.58	90	8.18 8.79	349	13.63 13.38	10.27	3.15	
1	19 JUL	0.0- 4.0	0835	20.5	41	580	2.8	13	.01 .04	53	.68 .64	208	2.79 3.39	913	4.27 4.00	25.34	1.36	
1	19 JUL	0.0- 4.0	0835	20.5	120	580	2.8	13	.02 .08	53	.84 .78	208	2.81 3.17	913	4.74 4.16	28.91	1.36	3
1	19 JUL	4.0- 8.0	0840	14.0	204	1070	15.7	8	.42 .40	34	3.00 2.44	115	8.78 8.34	448	10.42 8.50	9.02	3.22	
1	2 AUG	0.0- 4.8	0850	20.5	42	400	3.5	16	.12 .01	70	.95 .88	254	3.60 3.14	1117	4.48 4.17	36.53	1.45	
1	2 AUG	4.8- 8.0	0855	13.0	235	1140	20.5	7	.43 .38	31	2.73 2.62	107	8.74 8.24	422	12.73 15.46	7.35	3.88	
1	16 AUG	0.0- 5.0	1000	22.0	41	540	3.0	18	.01 .07	71	1.49 .87	242	3.22 3.25	896	4.39 5.15	37.57	2.09	
1	16 AUG	5.0- 7.8	1005	16.0	242	1290	18.4	17	.51 .40	41	3.28 3.22	133	12.49 10.02	531	18.81 8.89	21.05	5.42	
1	30 AUG	0.0- 6.0	0835	16.0	55	650	3.3	11	.11 .10	46	.85 1.01	160	3.42 4.48	707	4.82 4.92	9.36	1.47	
1	30 AUG	6.0- 8.0	0840	12.0	292	1420	29.8	5	.35 .57	21	2.52 2.68	75	8.82 8.96	299	14.99 14.67	10.03	2.54	
1	13 SEP	0.0- 6.0	1005	17.5	40	610	7.5	13	.14 .08	47	.98 .93	161	3.69 3.74	633	7.40 8.26	12.14	1.63	
1	13 SEP	6.0- 8.5	1010	13.0	303	1510	35.0	5	.08 .08	19	2.38 1.93	65	7.49 8.05	264	17.51 16.87	5.68	1.70	
1	27 SEP	0.0- 9.0	0925	13.0	46	680	6.4	7	.09 .08	29	.88 .76	103	3.89 4.66	412	8.05 10.06	11.28	1.69	
1	11 OCT	0.0- 9.5	1010	9.8	43	650	9.0	8	.12 .11	29	1.13 1.00	105	3.84 4.18	420	7.13 7.25	6.16	2.04	
1	26 OCT	0.0- 9.0	0855	7.5	41	790	6.0	12	.24 .26	48	1.48 1.42	171	4.72 4.28	729	4.38 4.83	5.99	1.92	

LAKE 303

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOP A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
0	24 MAY	0.0- .5	0950	15.5	65	890	3.0	13	.13 .04	43	-10.00 -10.00	158	5.49 5.33	913	6.66 7.87	28.08	3.42	1,2
1	24 MAY	0.0- .5	0950	15.5	65	890	3.0	5	.02 .03	21	.14 .20	208	3.78 4.37	847	8.23 9.23	16.26	3.42	
1	21 JUN	0.0- .5	1105	17.0	72	960	1.6	12	.01 .03	47	.26 .23	257	3.40 3.20	1096	5.32 5.55	23.55	1.26	
1	20 JUL	.3- .3	0855	23.0	75	1030	6.2	13	.29 .25	53	2.60 2.63	208	13.31 11.90	913	20.30 23.23	7.35	1.24	
1	16 AUG	0.0- 2.0	1005	22.0	66	2000	13.8	18	.45 .44	71	7.03 7.56	242	24.66 26.49	896	34.57 35.87	3.53	2.02	
1	14 SEP	0.0- 2.5	0920	16.5	80	2570	18.3	12	.67 .51	47	6.47 6.59	156	26.92 26.09	618	39.30 36.44	7.19	4.42	
1	13 OCT	0.0- 2.5	1050	8.5	64	2100	15.3	6	.19 .20	26	1.75 1.71	94	8.13 7.97	392	15.49 14.63	2.90	4.76	

LAKE 304

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASE	NOTE
0	24 MAY	0.0- 1.3	1015	15.5	80	560	3.0	13	.10 .07	43	.84 1.00	158	5.49 5.52	913	9.79 7.55	15.08	3.58	
1	24 MAY	0.0- 1.3	1015	15.5	80	560	3.0	5	.01 -.03	21	.06 .07	208	4.39 3.96	847	6.85 7.18	-56.37	3.58	
0	25 MAY	1.3- 4.0	0925	11.0	198	990	8.0	9	.27 .37	27	3.36 2.79	98	8.83 11.59	548	14.13 17.21	17.13	5.13	
1	25 MAY	1.3- 4.0	0925	11.0	198	990	8.0	4	.18 -.04	15	.62 .48	120	10.26 10.01	498	13.15 13.75	60.63	5.13	
1	21 JUN	0.0- 2.3	1045	17.0	85	890	3.7	12	.03 .01	47	.80 .61	257	5.97 6.08	1096	7.60 7.81	27.25	1.99	
1	22 JUN	2.3- 4.3	0935	12.0	254	1460	16.2	8	.62 .83	28	4.32 4.41	151	23.55 22.06	647	46.96 46.95	6.62	7.66	
1	26 JUL	0.0- 2.0	0850	22.0	83	670	4.6	14	.16 .27	63	1.18 1.13	224	6.86 6.83	941	13.29 10.74	13.81	1.80	
1	26 JUL	2.0- 4.0	0855	15.5	147	2680	107.7	6	-.01 -.11	23	2.72 1.34	81	9.62 6.08	310	39.22 27.43	34.93	28.47	
1	16 AUG	0.0- 2.5	0940	22.0	90	610	5.1	18	.20 .26	71	1.74 2.11	242	6.59 4.56	896	9.96 11.04	16.31	2.56	
1	16 AUG	2.5- 3.5	0945	16.0	121	8120	355.7	17	.82 2.86	41	19.03 5.75	133	58.57 20.09	531	23.64 55.58	70.13	115.38	1
1	14 SEP	0.0- 3.0	0855	16.5	116	860	25.0	12	.38 .33	47	2.60 2.15	156	8.36 9.67	618	23.61 28.56	11.86	5.46	
1	14 SEP	3.0- 4.5	0900	14.0	234	740	28.5	6	-.10 -.03	22	.29 .88	70	2.44 2.13	281	13.38 11.24	30.90	2.70	
1	13 OCT	0.0- 4.0	1015	8.5	163	470	12.2	6	.19 .19	26	.54 .43	94	1.44 2.55	392	9.32 13.17	20.86	.96	

LAKE 305

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
0	31 MAY	0.0- 2.0	1105	18.0	132	380	.7	12	.02 .03	41	.41 .26	158	2.16 2.39	946	3.93 3.66	19.05	1.04	
1	31 MAY	0.0- 2.0	1105	18.0	132	380	.7	10	-.02 .53	23	.02 .17	224	2.10 2.03	1062	2.38 3.54	46.03	1.04	
0	2 JUN	2.0- 5.5	0915	12.0	123	390	1.0	8	-.02 .13	27	.37 .26	105	1.90 1.74	581	1.94 2.06	11.51	1.05	
1	2 JUN	2.0- 5.5	0915	12.0	123	390	1.0	3	-.06 .16	21	.13 .20	106	1.61 1.46	531	1.86 1.71	14.98	1.05	
0	3 JUN	6.5-15.5	0855	8.5	165	340	4.5	6	.15 .18	19	.73 .67	75	1.93 2.15	432	2.56 2.40	7.46	.66	
1	3 JUN	6.5-15.5	0855	8.5	165	340	4.5	3	-.04 .03	15	.46 .39	81	1.98 2.12	398	2.27 2.33	6.00	.66	
1	28 JUN	0.0- 5.0	0825	18.5	125	350	1.1	12	.52 .44	43	.46 .35	232	1.39 .94	996	1.44 .94	21.91	.45	1
1	28 JUN	5.0- 8.0	0830	13.0	124	0	1.6	9	.01 .06	30	.19 .17	146	1.29 1.10	498	1.40 1.40	26.16	.47	1
1	30 JUN	8.0-16.0	0920	7.0	182	260	4.1	6	.68 -.04	20	.28 .13	98	2.17 2.51	349	4.85 4.[illegible]	59.34	.69	
1	30 JUN	8.0-16.0	0920	17.0	182	260	4.1	5	-.01 .06	17	.46 .46	93	2.14 2.05	349	2.32 1.77	7.32	.69	1,5
1	27 JUL	0.0- 5.3	1030	23.0	114	380	1.4	16	.06 .01	73	.50 .49	256	2.30 2.14	1096	2.57 2.46	28.18	.64	
1	27 JUL	0.0- 5.3	1030	23.0	114	380	1.4	16	.06 .01	73	.50 .49	256	2.30 2.14	1096	2.57 2.46	28.18	.64	
1	27 JUL	5.3-10.0	1035	14.5	125	460	2.4	6	.02 .06	27	.49 .49	93	1.80 2.03	395	3.18 3.05	17.66	.34	
1	28 JUL	10.0-15.0	0825	9.0	205	330	1.7	5	.03 .02	22	.46 .46	75	1.62 1.63	289	1.69 1.73	2.09	.46	
1	24 AUG	0.0- 6.5	0820	20.0	162	380	2.8	21	-.05 .02	34	1.12 1.22	270	3.80 4.01	1062	4.80 3.99	7.55	.98	
1	24 AUG	6.5-10.0	0825	15.5	127	620	5.1	6	.10 .09	26	.90 .93	89	2.29 2.68	372	4.64 4.07	8.60	.51	
1	25 AUG	10.0-15.5	0830	9.0	206	5390	3.0	6	-.07 -.08	23	.37 .26	75	1.14 .87	298	1.68 1.71	15.16	.22	
1	21 SEP	0.0- 9.0	0835	14.0	127	540	1.4	13	.11 .11	54	.58 .64	184	1.79 1.81	702	2.34 2.22	3.34	.51	
1	21 SEP	9.0-11.0	0840	11.0	143	710	3.3	6	.10 .06	23	.65 .83	76	2.24 2.09	309	2.43 3.43	18.77	.74	
1	22 SEP	11.0-15.0	0905	8.0	209	470	2.7	4	.48 .10	15	.36 .35	51	1.05 1.03	199	1.63 1.66	24.68	.39	
1	25 OCT	0.0-14.0	1045	7.5	140	550	2.0	12	.16 .12	48	.68 .71	171	1.92 1.51	674	1.30 1.76	15.63	.38	

LAKE 382

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	SEC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
0	31 MAY	0.0- 2.0	0950	18.0	94	450	1.8	12	.09 .09	41	.71 .64	158	2.79 2.86	946	2.90 3.09	3.55	1.15	
1	31 MAY	0.0- 2.0	0950	18.0	94	450	1.8	10	.02 .02	23	.15 .19	224	2.34 2.47	1062	3.11 3.42	13.91	1.13	
0	2 JUN	2.0- 6.5	0945	13.0	114	680	5.6	8	.34 .32	27	1.68 1.38	105	4.10 4.96	581	5.01 4.49	9.90	1.41	
1	2 JUN	2.0- 6.5	0945	13.0	114	680	5.6	3	.06 .01	21	.88 .94	106	4.14 3.90	531	4.25 3.85	30.90	1.41	
0	3 JUN	6.0- 8.0	0925	8.5	175	570	7.2	6	.27 .23	19	1.41 1.32	75	4.83 4.51	432	4.71 5.23	7.18	1.36	
1	3 JUN	6.0- 8.0	0925	8.5	175	570	7.2	3	.08 .08	15	.78 1.15	81	5.00 4.50	398	4.45 3.54	13.54	1.36	
1	26 JUN	0.0- 4.0	0910	18.5	85	760	3.3	13	.02 .01	43	.79 .44	232	3.41 3.53	996	4.69 3.73	16.85	-10.00	2
1	26 JUN	4.0- 8.0	0915	13.0	169	770	5.6	9	.25 .26	30	.89 1.53	146	6.43 9.85	498	9.17 11.64	21.39	1.25	
1	26 JUL	0.0- 4.5	0830	22.0	79	630	3.6	14	.03 -.03	63	1.17 1.14	224	2.43 4.35	941	6.70 6.20	888888	.91	
1	26 JUL	4.5- 8.5	0835	15.5	250	780	3.3	6	.11 -.04	23	.50 .71	81	2.17 2.04	310	4.08 4.92	84.08	.62	
1	23 AUG	0.0- 4.0	0910	19.5	83	540	4.9	20	.16 .19	79	1.59 1.55	264	2.79 3.67	939	4.81 3.12	16.48	1.36	
1	23 AUG	4.0- 8.0	0915	15.5	250	660	6.3	6	-.03 .04	23	.65 .58	85	2.76 2.65	349	4.78 3.76	9.12	.96	
1	20 SEP	0.0- 7.0	0910	13.5	98	730	3.5	11	.10 .13	42	1.07 1.05	153	4.03 3.94	602	4.71 2.54	15.81	1.06	
1	20 SEP	7.0- 8.0	0915	11.5	266	760	7.4	6	.05 .13	21	1.19 1.24	69	3.57 5.30	279	6.98 6.75	25.84	1.49	
1	25 OCT	0.0- 8.0	0945	7.5	105	480	3.6	13	.16 .14	48	.81 .78	171	2.03 2.10	674	3.33 3.06	4.33	.91	

LAKE 382 BAY

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
0	31 MAY	0.0- 2.0	1005	18.0	103	710	2.1	12	.08 .04	41	1.13 1.17	158	5.68 6.87	946	9.57 8.39	17.42	1.41	
1	31 MAY	0.0- 2.0	1005	18.0	103	710	2.1	10	.04 .31	23	.34 .26	224	5.60 5.79	1062	9.15 9.12	33.26	1.41	
1	28 JUN	0.0- 3.0	0935	18.5	91	820	3.7	12	.05 .03	43	.75 .75	232	4.69 5.44	996	5.69 6.56	13.33	.88	
1	26 JUL	0.0- 3.0	0855	22.0	88	740	4.6	14	.08 .05	63	1.08 1.07	224	4.69 4.77	941	7.56 7.27	8.88	.94	
1	23 AUG	0.0- 3.0	0940	19.5	90	670	6.4	20	.21 .22	79	1.64 1.70	264	5.56 5.16	929	7.62 7.68	2.74	1.58	
1	20 SEP	0.0- 3.0	0930	13.5	81	690	2.9	11	.09 .08	42	.76 .63	153	2.28 3.00	603	4.83 4.02	13.46	1.37	
1	25 OCT	0.0- 3.0	1000	7.5	114	580	3.3	12	.07 .07	48	.52 .48	171	1.97 2.00	674	4.29 3.42	5.69	1.22	

LAKE 661

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
0	24 MAY	0.0- .3	1040	15.5	93	580	2.0	13	.05 .04	43	.56 .59	158	3.71 4.17	913	7.10 8.12	7.12	1.43	
1	24 MAY	0.0- .3	1040	15.5	93	580	2.0	5	-.01 .00	21	.03 .02	208	3.75 3.31	847	6.18 6.51	12.35	1.43	
1	21 JUN	0.0- .3	1115	17.0	78	910	2.5	12	.02 -.02	47	.18 .13	257	2.34 2.80	1096	4.50 4.86	$$$$$$	1.27	
1	20 JUL	.3- .3	0810	23.0	88	530	3.1	13	.06 .09	53	.67 .54	208	2.94 3.02	913	6.84 7.25	12.85	.86	
1	16 AUG	.3- .3	1020	22.0	86	790	4.9	18	.08 .07	71	1.18 1.21	262	6.09 5.60	896	9.68 11.21	6.52	.84	
1	14 SEP	0.0- .3	0930	16.5	107	650	4.1	12	.24 -.01	47	.41 .35	156	2.11 1.84	618	5.01 5.62	45.51	.51	
1	13 OCT	0.0- .3	1110	8.5	117	810	6.3	6	.02 .06	26	.35 .43	94	2.32 2.86	392	6.11 6.00	23.25	1.55	

APPENDIX 2

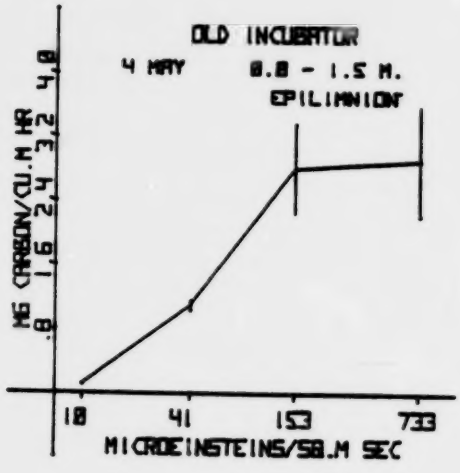
"PRESENT SITE" LAKE BASINS

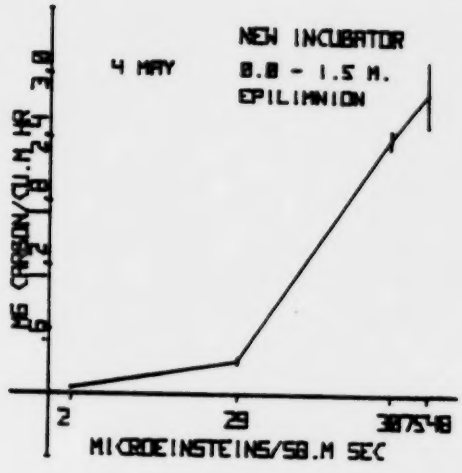
Plots of photosynthetic carbon uptake versus incubator irradiance are chronologically arranged according to lake basin. Irradiance is plotted on a logarithmic scale showing the actual light value. Production is plotted on a linear scale. The vertical bars of the plot join the replicate bottle values for each irradiance.

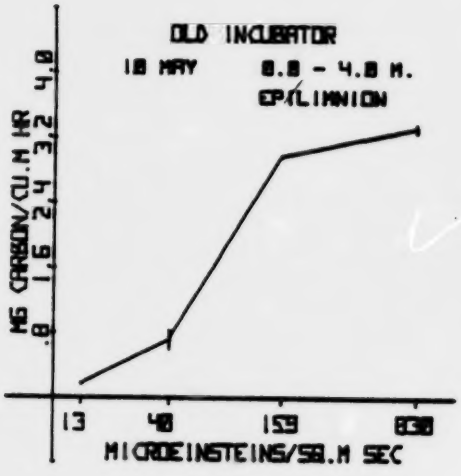
The light incubator type used to determine carbon uptake versus irradiance is shown on each plot as well as the date, depth and thermal zone.

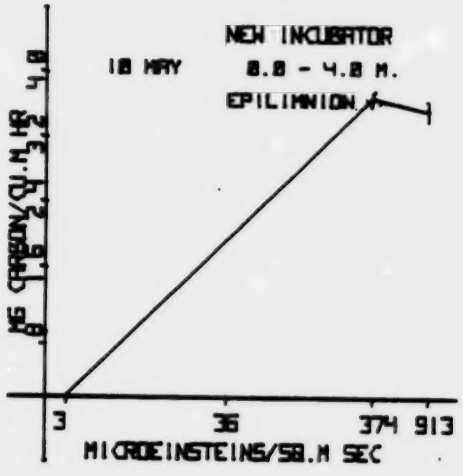
MR noted on plot indicates missing replicate.

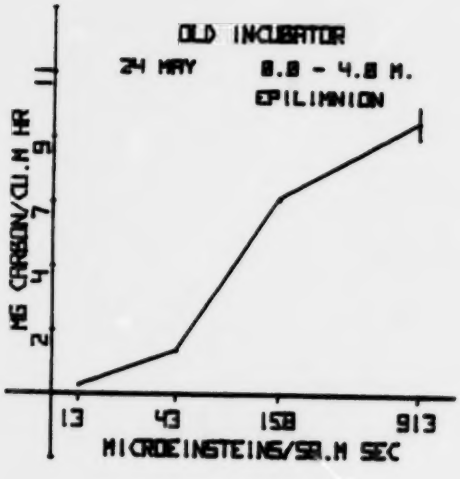
LAKE 114

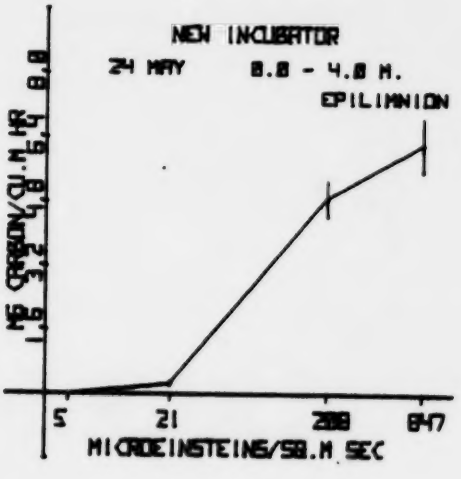

OLD INCUBATOR
4 MAY 0.8 - 1.5 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
18 41 153 733
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
4 MAY 0.8 - 1.5 M.
EPILIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
2 29 387548
MICROEINSTEINS/SQ.M SEC

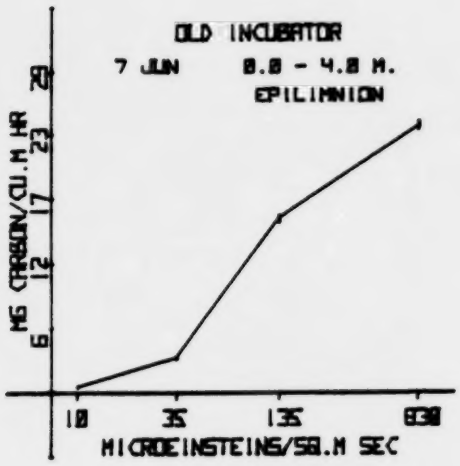

OLD INCUBATOR
18 MAY 0.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
13 40 159 838
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
18 MAY 0.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
3 36 374 913
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
24 MAY 0.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
2 4 7 9 11
13 43 158 913
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
24 MAY 0.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
1.6 3.2 4.8 6.4 8.0
5 21 200 847
MICROEINSTEINS/SQ.M SEC

LAKE 114


OLD INCUBATOR
7 JUN 0.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
6 12 17 23 29
10 35 135 838
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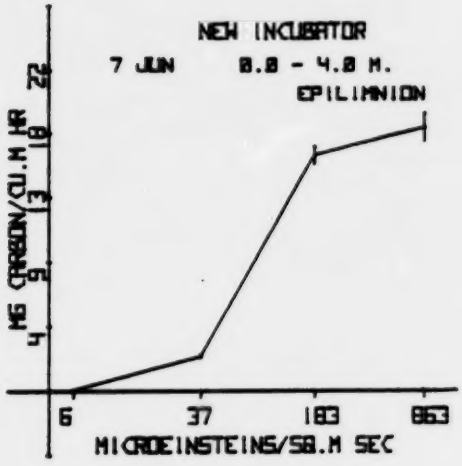
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EPILIMNION
MG CARBON/CU.M HR
4 9 13 18 22
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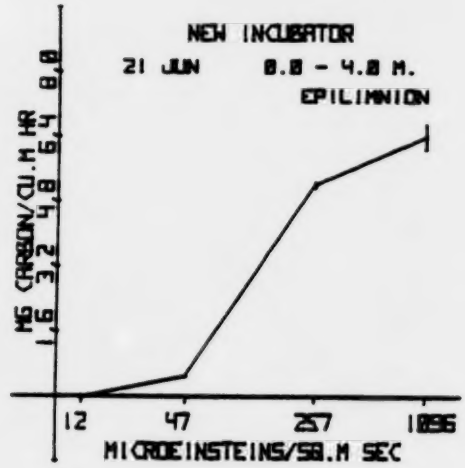
NEW INCUBATOR
21 JUN 0.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
1.6 3.2 4.8 6.4 8.0
12 47 257 1896
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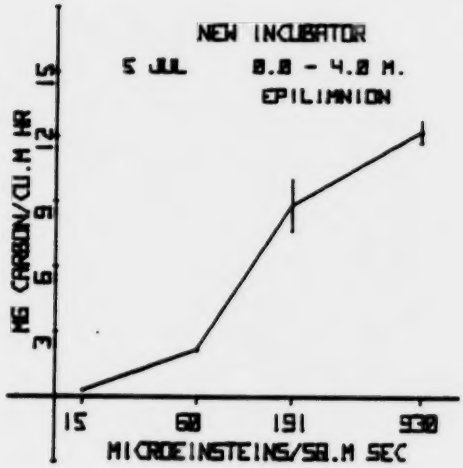
NEW INCUBATOR
5 JUL 0.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
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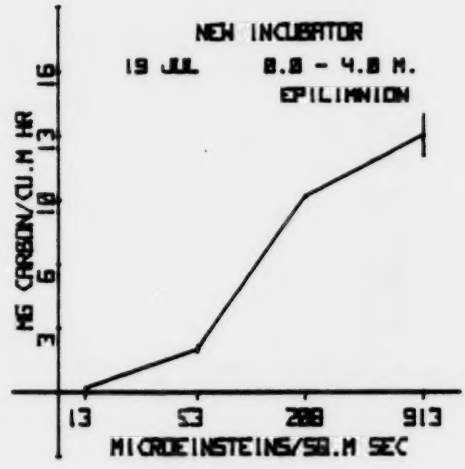
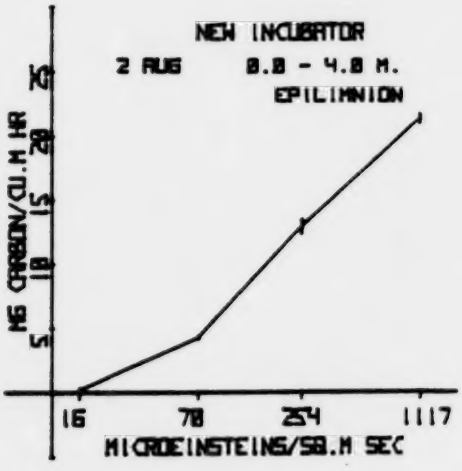
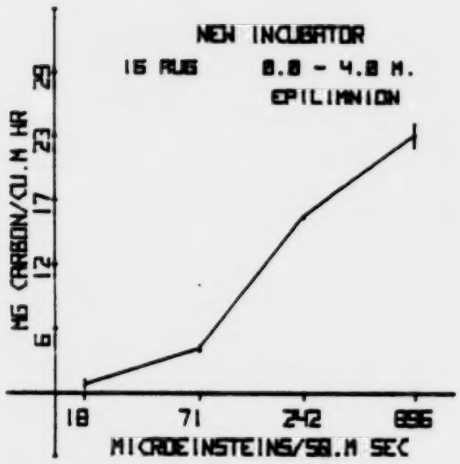
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
19 JUL 0.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
3 6 10 13 16
13 53 208 913
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
2 AUG 0.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
5 10 15 20 25
16 78 254 1117
MICROEINSTEINS/SQ.M SEC

LAKE 114


NEW INCUBATOR
16 AUG 8.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
6 12 17 23 29
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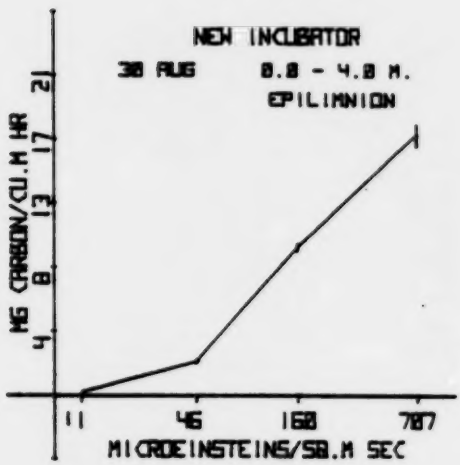
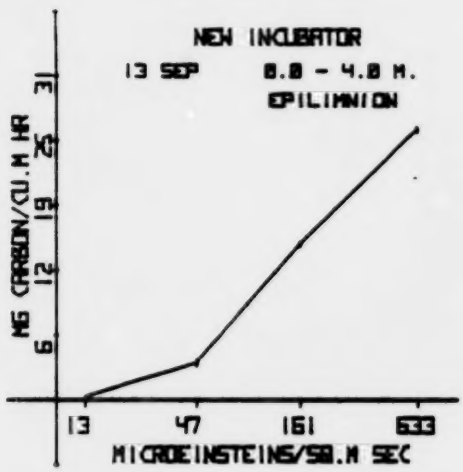
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
30 AUG 8.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
4 8 13 17 21
11 46 168 787
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
13 SEP 8.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
6 12 19 25 31
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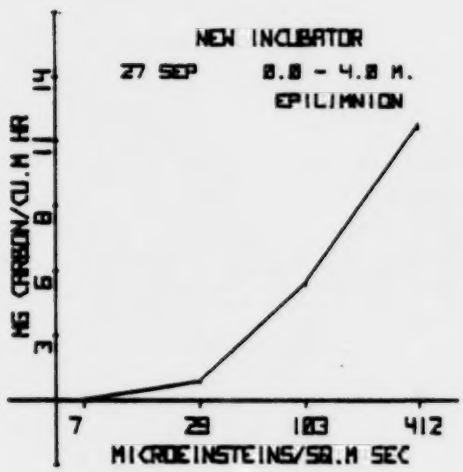
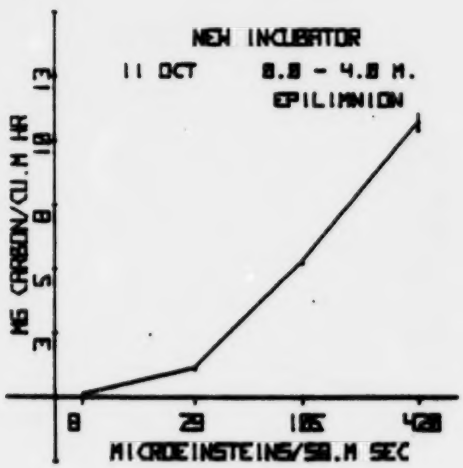
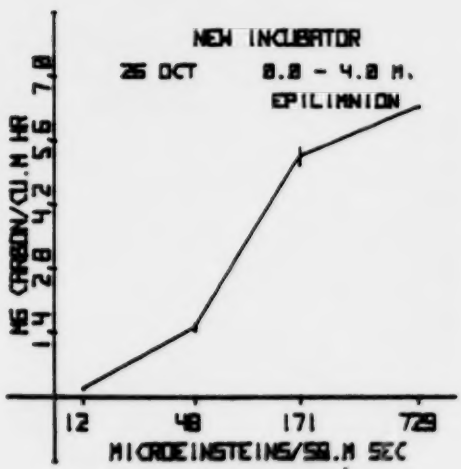
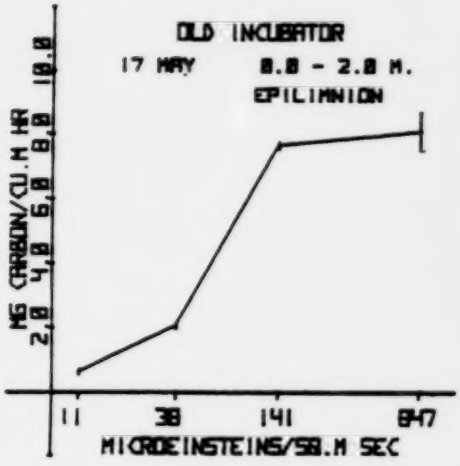
MICROEINSTEINS/SQ.M SEC

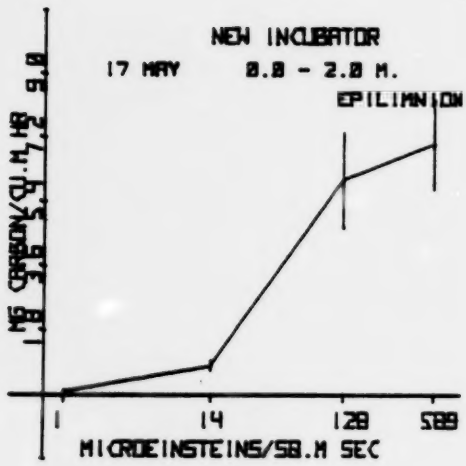

NEW INCUBATOR
27 SEP 8.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
3 6 8 11 14
7 29 103 412
MICROEINSTEINS/SQ.M SEC

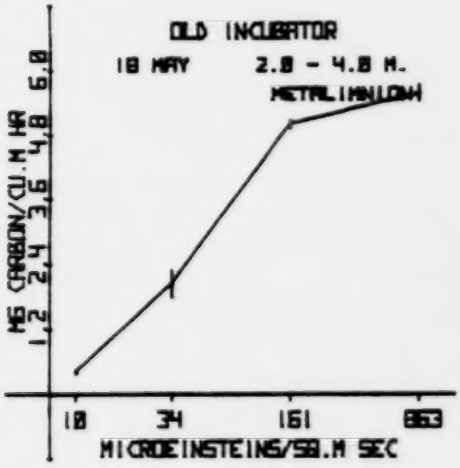

NEW INCUBATOR
11 OCT 8.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
3 5 8 10 13
8 29 185 428
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
26 OCT 8.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
1,4 2,8 4,2 5,6 7,0
12 48 171 729
MICROEINSTEINS/SQ.M SEC

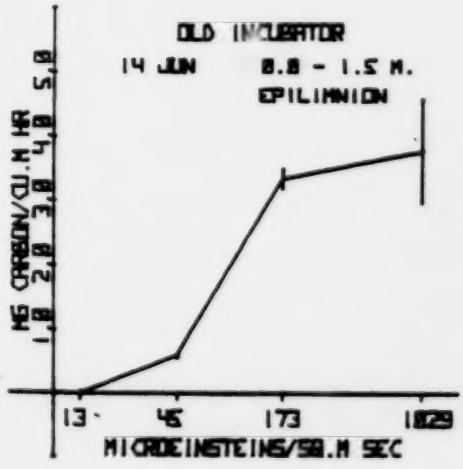
LAKE 222

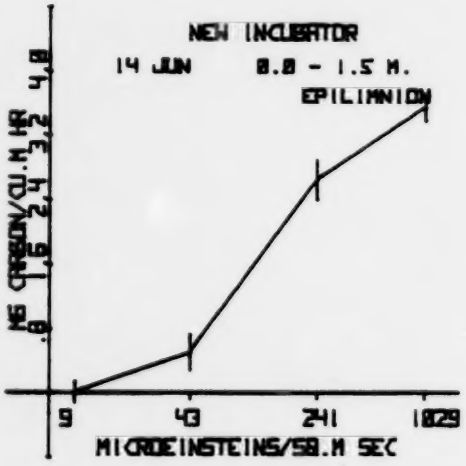

OLD INCUBATOR
17 MAY 0.8 - 2.8 M.
EPILIMNION
MG CARBON/CU.M HR
2.0 4.0 6.0 8.0 10.0
11 38 141 847
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
17 MAY 0.8 - 2.8 M.
EPILIMNION
MG CARBON/CU.M HR
1.0 3.5 5.0 7.2 9.0
1 14 128 589
MICROEINSTEINS/SQ.M SEC

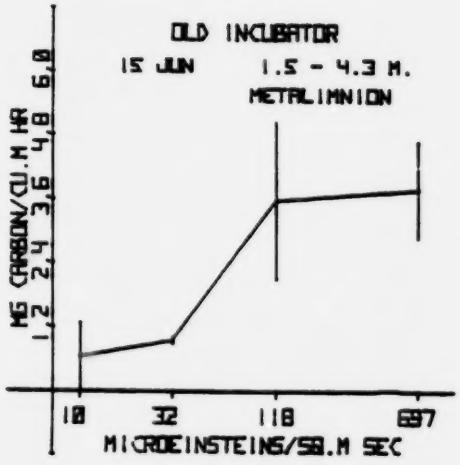

OLD INCUBATOR
18 MAY 2.8 - 4.8 M.
METALIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
18 34 161 863
MICROEINSTEINS/SQ.M SEC

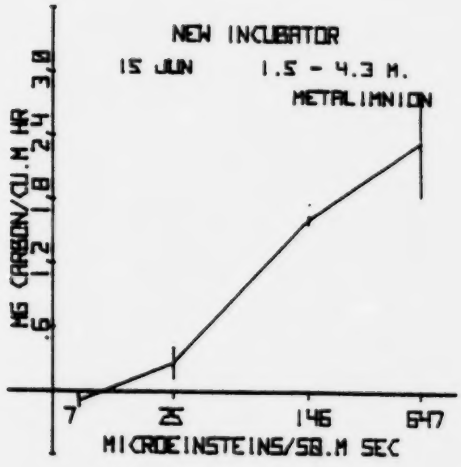
NEW INCUBATOR
18 MAY 2.8 - 4.8 M.
METALIMNION
MG CARBON/CU.M HR
1.0 2.8 3.0 4.0 5.0
3 12 98 407
MICROEINSTEINS/SQ.M SEC

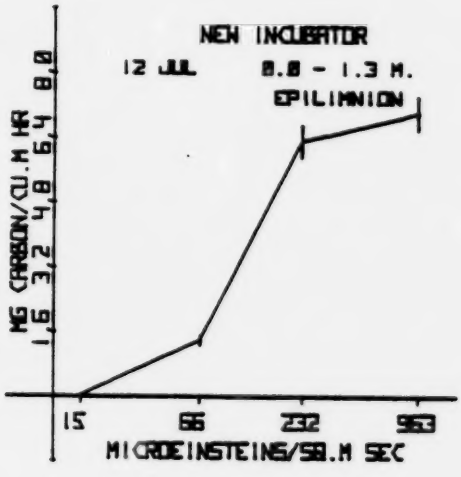

OLD INCUBATOR
14 JUN 0.8 - 1.5 M.
EPILIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
13 45 173 1829
MICROEINSTEINS/SQ.M SEC

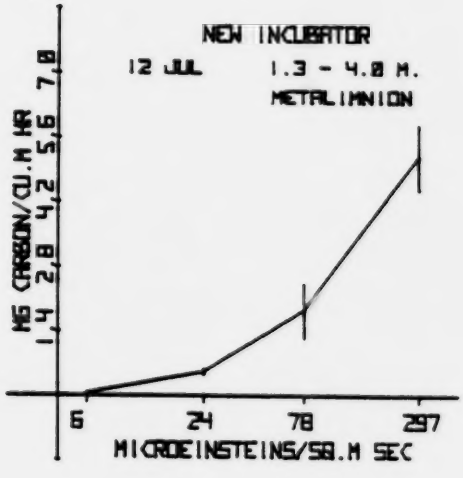

NEW INCUBATOR
14 JUN 0.8 - 1.5 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
9 43 241 1829
MICROEINSTEINS/SQ.M SEC

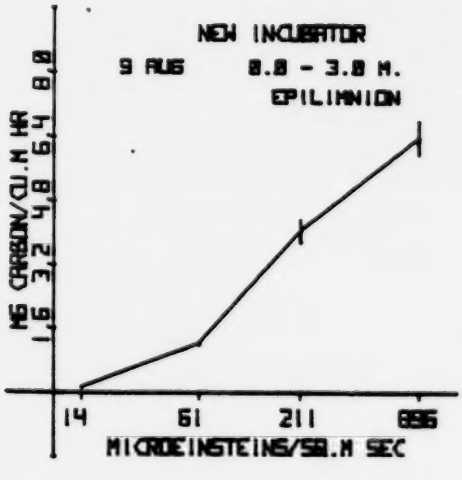
LAKE 222


OLD INCUBATOR
15 JUN 1.5 - 4.3 M.
METALIMNION
MG CARBON/CU.M HR
1,2 2,4 3,6 4,8 6,0
10 32 118 697
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
15 JUN 1.5 - 4.3 M.
METALIMNION
MG CARBON/CU.M HR
,6 1,2 1,8 2,4 3,0
7 25 146 647
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
12 JUL 0.0 - 1.3 M.
EPILIMNION
MG CARBON/CU.M HR
1,6 3,2 4,8 6,4 8,0
15 66 232 953
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
12 JUL 1.3 - 4.0 M.
METALIMNION
MG CARBON/CU.M HR
1,4 2,8 4,2 5,6 7,0
6 24 78 297
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
9 AUG 0.0 - 3.0 M.
EPILIMNION
MG CARBON/CU.M HR
1,6 3,2 4,8 6,4 8,0
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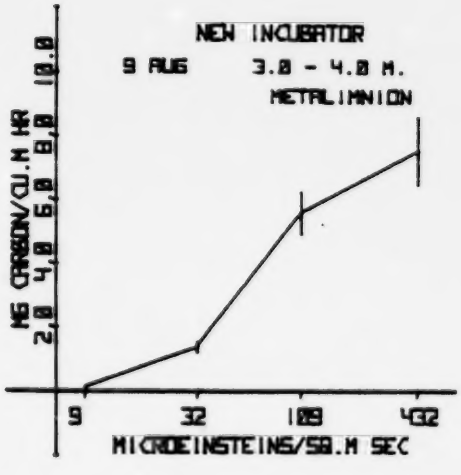
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
9 AUG 3.0 - 4.0 M.
METALIMNION
MG CARBON/CU.M HR
2,0 4,0 6,0 8,0 10,0
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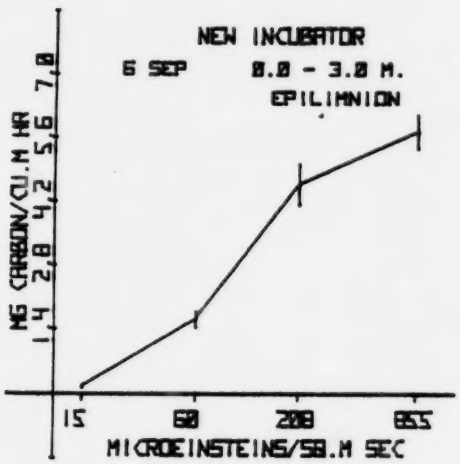
MICROEINSTEINS/SQ.M SEC

LAKE 222


NEW INCUBATOR
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EPILIMNION
MG CARBON/CU.M HR
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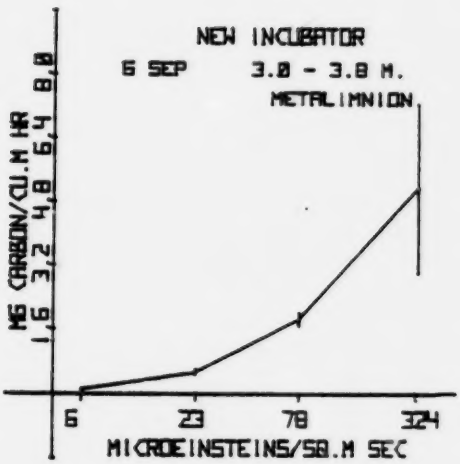
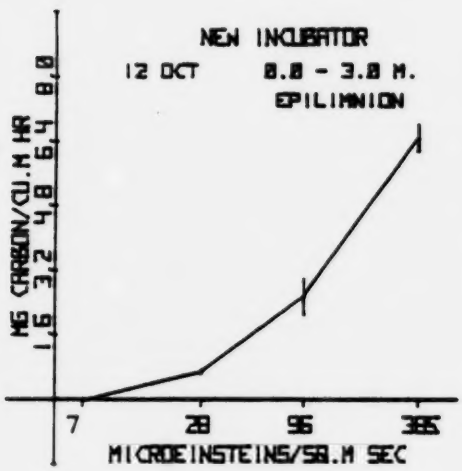
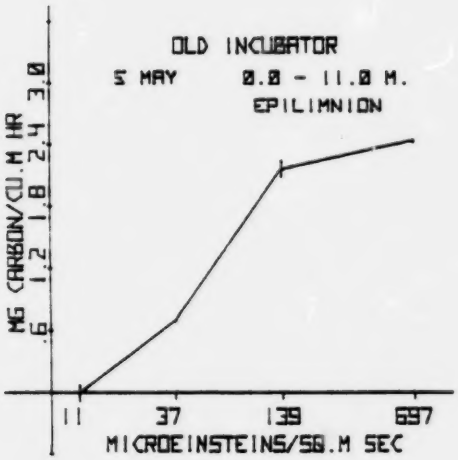
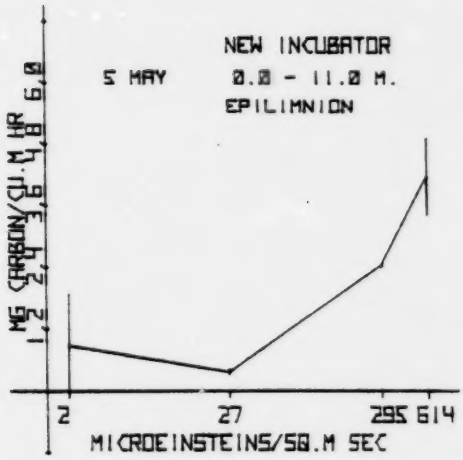
MICROEINSTEINS/SQ.M SEC

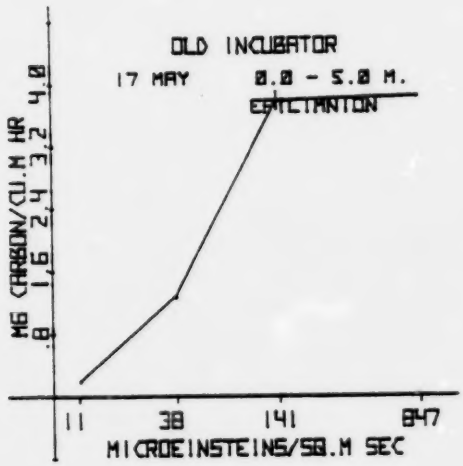

NEW INCUBATOR
6 SEP 3.0 - 3.0 M.
METALIMNION
MG CARBON/CU.M HR
1,6 3,2 4,8 6,4 8,0
6 23 78 324
MICROEINSTEINS/SQ.M SEC

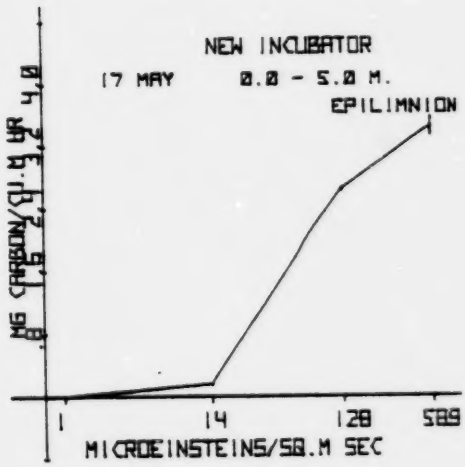

NEW INCUBATOR
12 OCT 0.0 - 3.0 M.
EPILIMNION
MG CARBON/CU.M HR
1,6 3,2 4,8 6,4 8,0
7 28 96 385
MICROEINSTEINS/SQ.M SEC

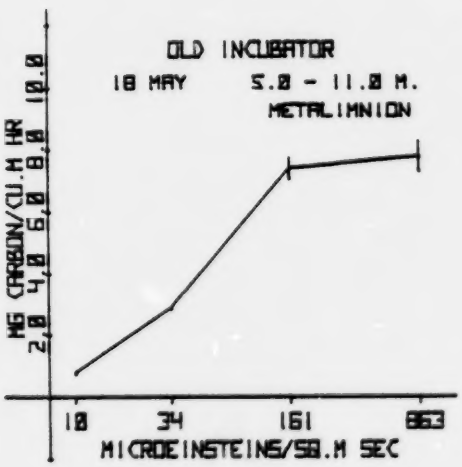
LAKE 223

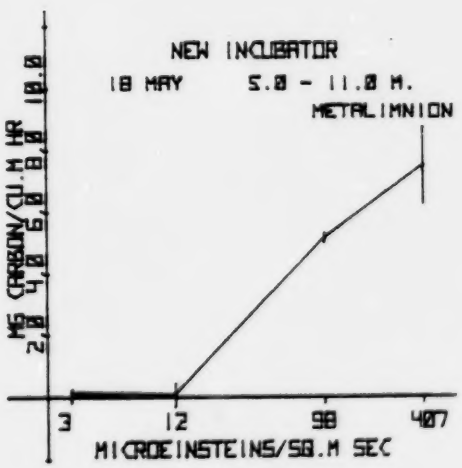

OLD INCUBATOR
5 MAY 0.0 - 11.0 M.
EPILIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
11 37 139 697
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
5 MAY 0.0 - 11.0 M.
EPILIMNION
MG CARBON/CU.M HR
2 27 295 614
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
17 MAY 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
11 38 141 847
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
17 MAY 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
1 14 128 589
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
18 MAY 5.0 - 11.0 M.
METALIMNION
MG CARBON/CU.M HR
2.0 4.0 6.0 8.0 10.0
10 34 161 863
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
18 MAY 5.0 - 11.0 M.
METALIMNION
MG CARBON/CU.M HR
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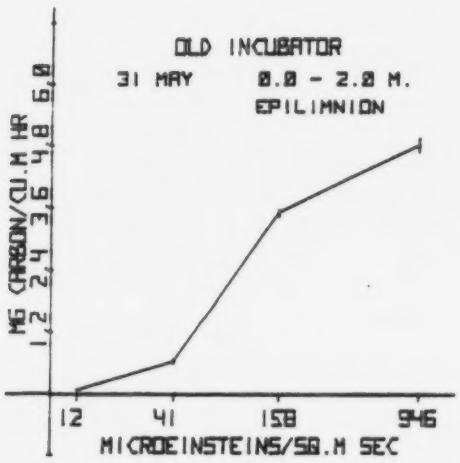
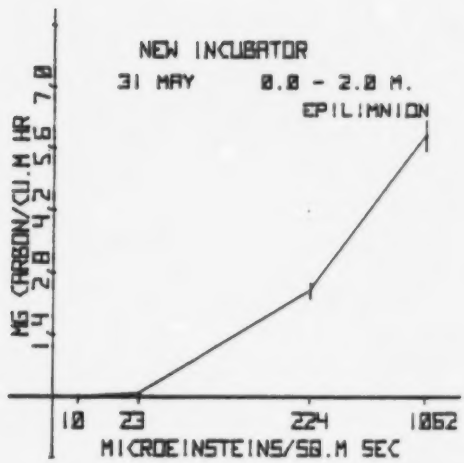
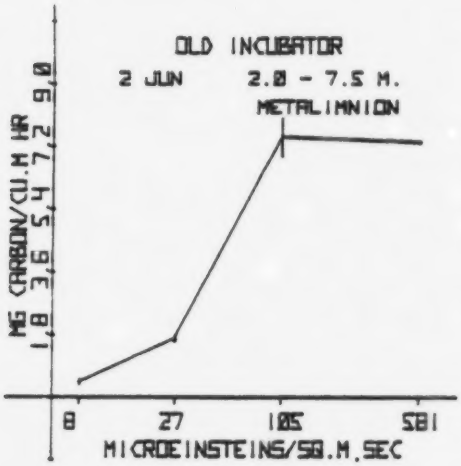
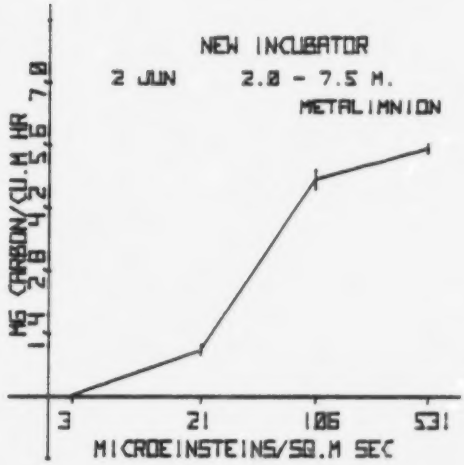
MICROEINSTEINS/SQ.M SEC

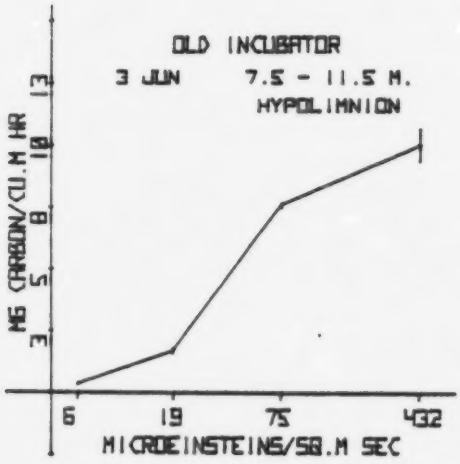
LAKE 223

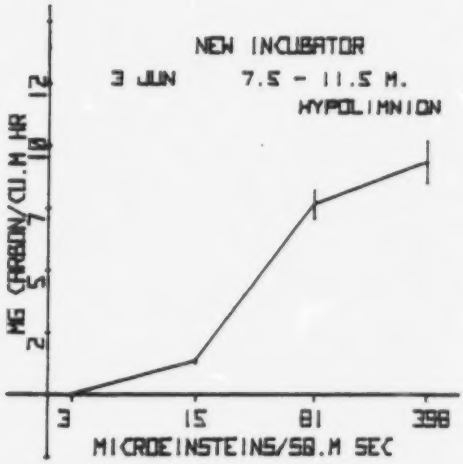

OLD INCUBATOR
31 MAY 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
1,2 2,4 3,6 4,8 6,0
12 41 158 946
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
31 MAY 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
1,4 2,8 4,2 5,6 7,0
10 23 224 1062
MICROEINSTEINS/SQ.M SEC

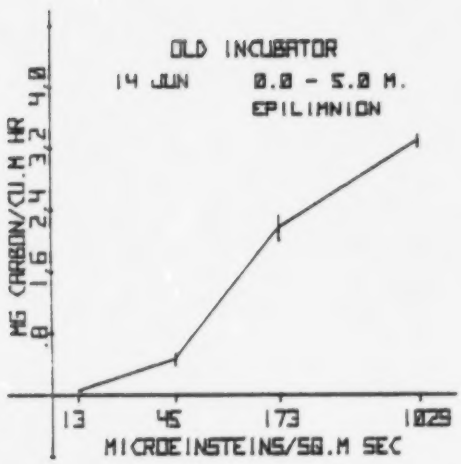

OLD INCUBATOR
2 JUN 2.0 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
1,8 3,6 5,4 7,2 9,0
8 27 105 581
MICROEINSTEINS/SQ.M SEC

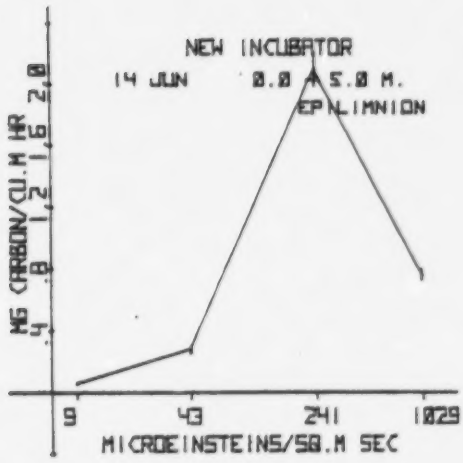

NEW INCUBATOR
2 JUN 2.0 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
1,4 2,8 4,2 5,6 7,0
3 21 106 531
MICROEINSTEINS/SQ.M SEC

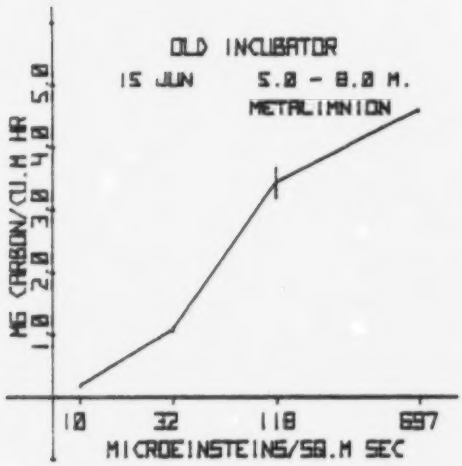

OLD INCUBATOR
3 JUN 7.5 - 11.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
3 5 8 10 13
6 19 75 432
MICROEINSTEINS/SQ.M SEC

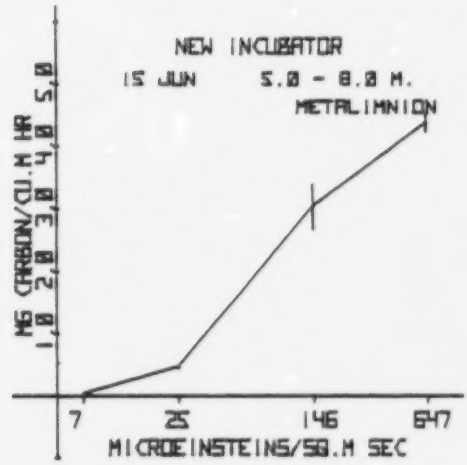

NEW INCUBATOR
3 JUN 7.5 - 11.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
2 5 7 10 12
3 15 81 398
MICROEINSTEINS/SQ.M SEC

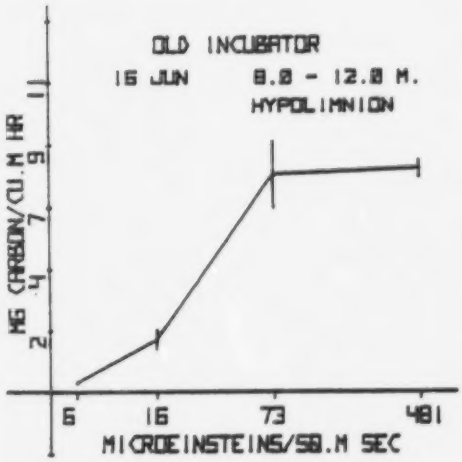
LAKE 223

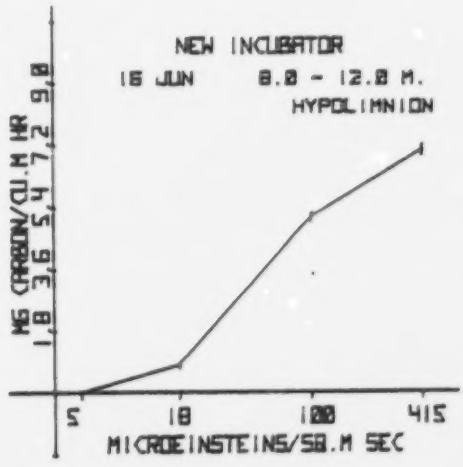

OLD INCUBATOR
14 JUN 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
13 45 173 1029
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
14 JUN 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.0
9 43 241 1029
MICROEINSTEINS/SQ.M SEC

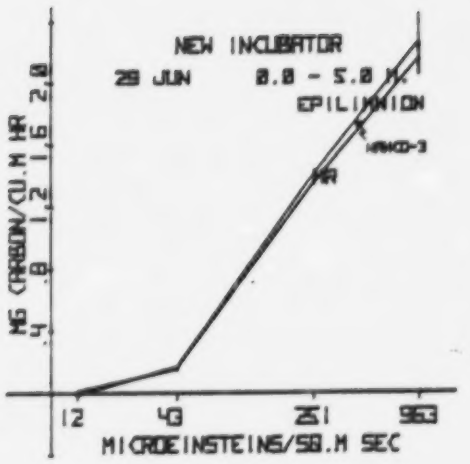

OLD INCUBATOR
15 JUN 5.0 - 8.0 M.
METALIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
10 32 118 697
MICROEINSTEINS/SQ.M SEC

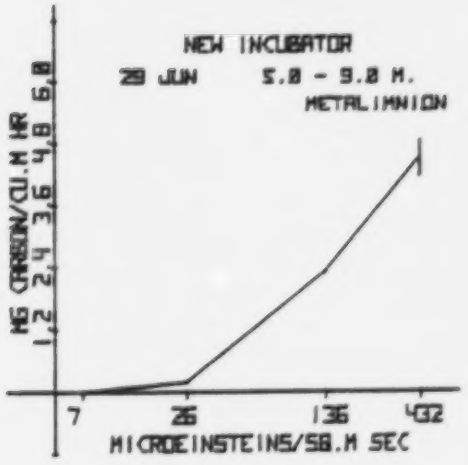

NEW INCUBATOR
15 JUN 5.0 - 8.0 M.
METALIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
7 25 146 647
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
16 JUN 8.0 - 12.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
2 4 7 9 11
6 16 73 481
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
16 JUN 8.0 - 12.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
1.8 3.6 5.4 7.2 9.0
5 18 100 415
MICROEINSTEINS/SQ.M SEC

LAKE 223


NEW INCUBATOR
29 JUN 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
12
43
251
953


NEW INCUBATOR
29 JUN 5.0 - 9.0 M.
METALIMNION
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
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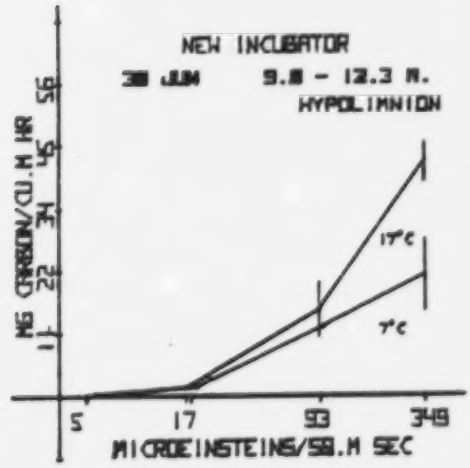
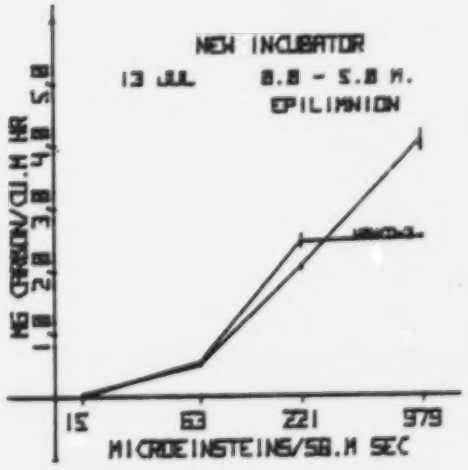
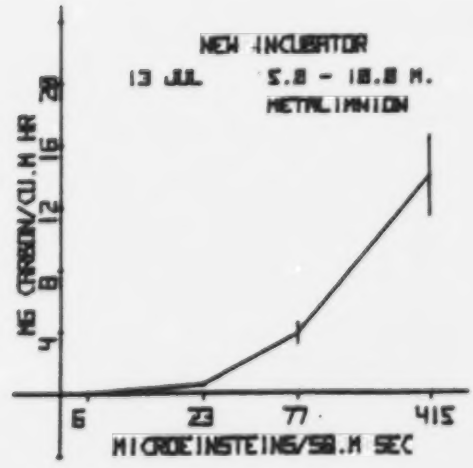
26
136
432


NEW INCUBATOR
30 JUN 9.0 - 12.3 M.
HYPOLIMNION
17°C
7°C
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
5
17
93
349


NEW INCUBATOR
13 JUL 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
15
63
221
979


NEW INCUBATOR
13 JUL 5.0 - 10.0 M.
METALIMNION
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
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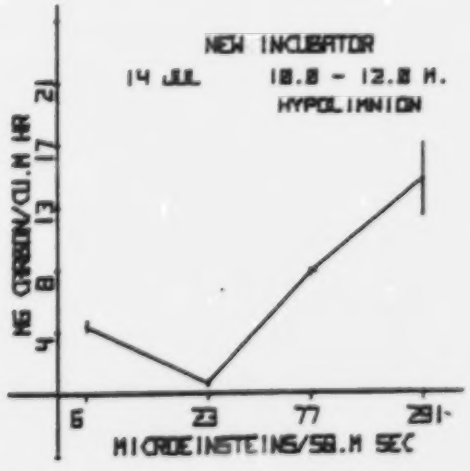
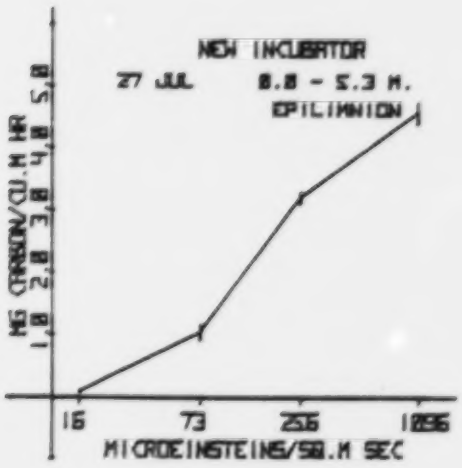
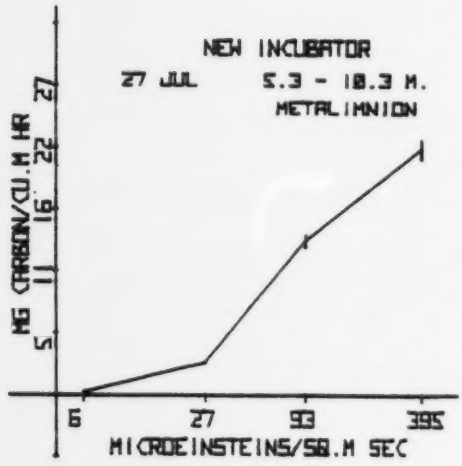
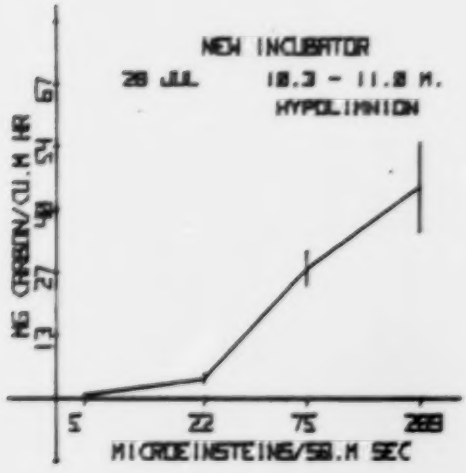
23
77
415


NEW INCUBATOR
14 JUL 10.0 - 12.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
6
23
77
291

LAKE 223


NEW INCUBATOR
27 JUL 0.0 - 5.3 M.
EPILIMNION
MG CARBON/CU.M HR
1,0 2,0 3,0 4,0 5,0
16 73 256 1096
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
27 JUL 5.3 - 10.3 M.
METALIMNION
MG CARBON/CU.M HR
5, 11 16 22 27
6 27 93 395
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
28 JUL 10.3 - 11.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
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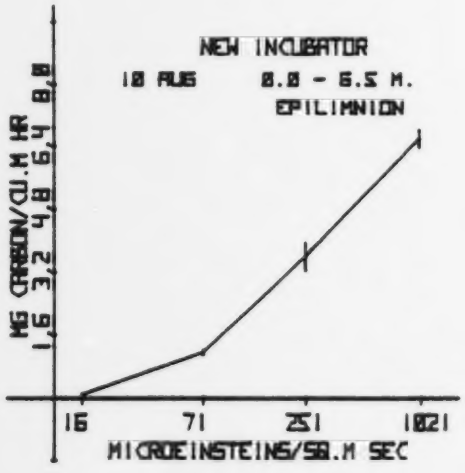
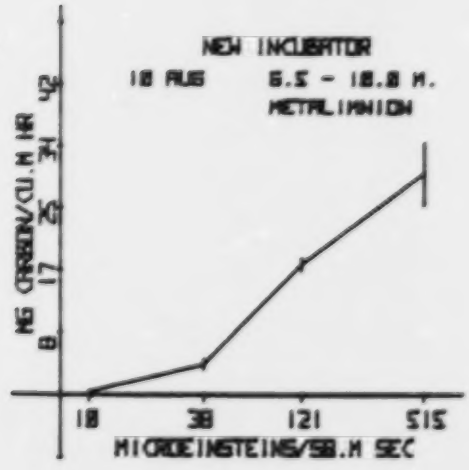
5 22 75 288
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
10 AUG 0.0 - 6.5 M.
EPILIMNION
MG CARBON/CU.M HR
1,6 3,2 4,8 6,4 8,0
16 71 251 1021
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
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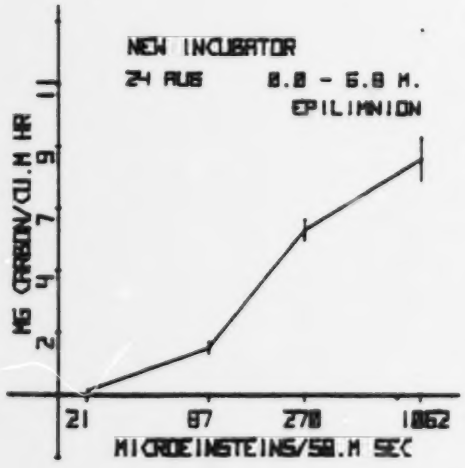
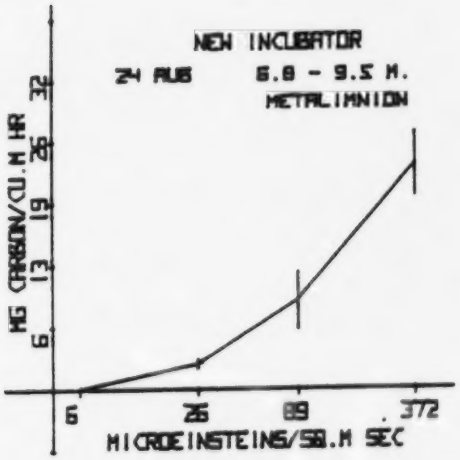
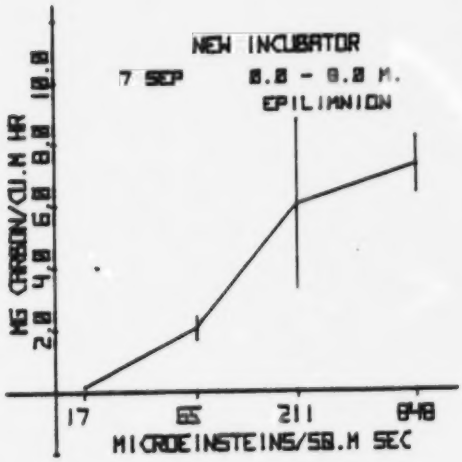
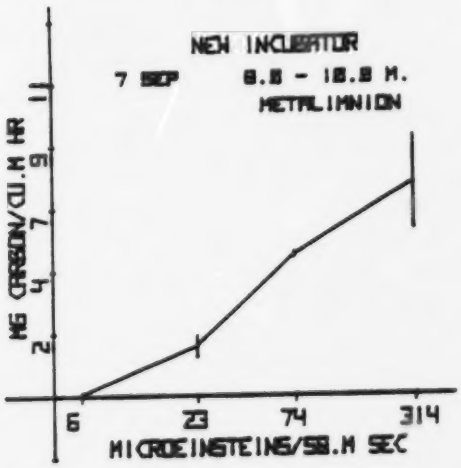
METALIMNION
MG CARBON/CU.M HR
8, 17 25 34 42
18 38 121 515
MICROEINSTEINS/SQ.M SEC

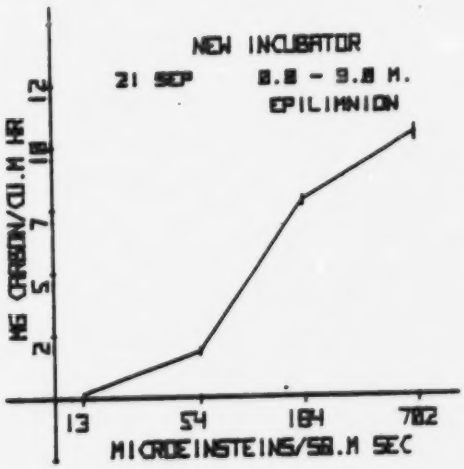

NEW INCUBATOR
24 AUG 0.0 - 6.0 M.
EPILIMNION
MG CARBON/CU.M HR
2, 4 7 9 11
21 87 278 1062
MICROEINSTEINS/SQ.M SEC

LAKE 223


NEW INCUBATOR
24 AUG 6.8 - 9.5 M.
METALIMNION
MG CARBON/CU.M HR
6 13 19 26 32
6 26 89 372
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
7 SEP 8.8 - 8.8 M.
EPILIMNION
MG CARBON/CU.M HR
2.8 4.8 6.8 8.8 10.8
17 65 211 848
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
7 SEP 8.8 - 18.8 M.
METALIMNION
MG CARBON/CU.M HR
2 4 7 9 11
6 23 74 314
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
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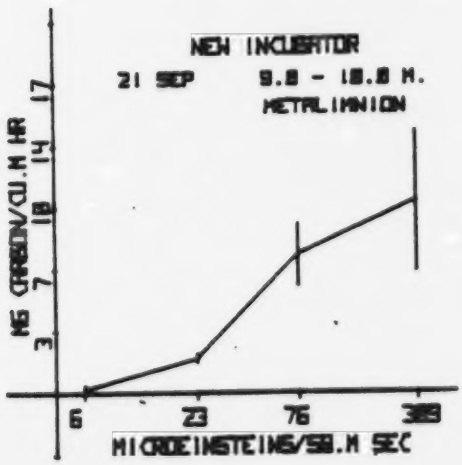
EPILIMNION
MG CARBON/CU.M HR
2 5 7 10 12
13 54 184 782
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
21 SEP 9.8 - 18.8 M.
METALIMNION
MG CARBON/CU.M HR
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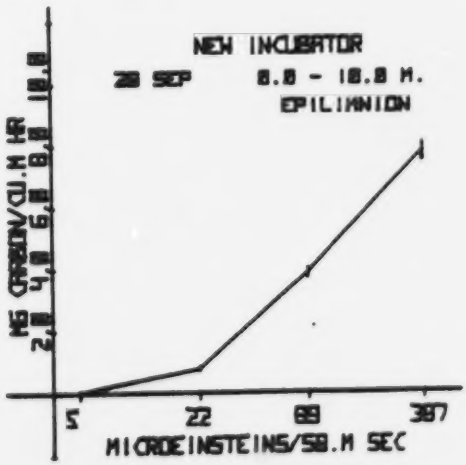
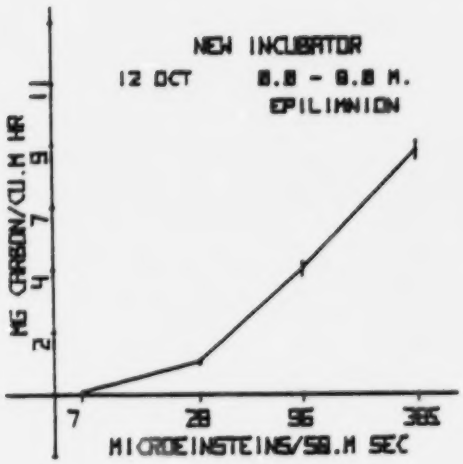
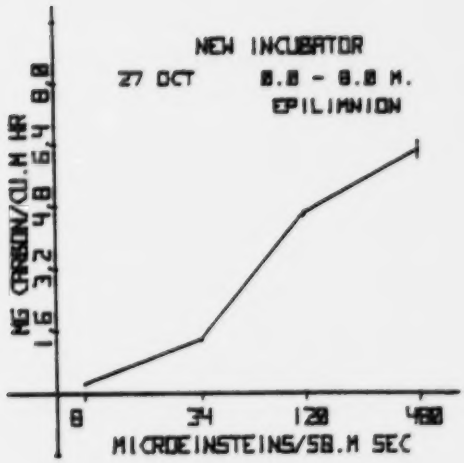
MICROEINSTEINS/SQ.M SEC

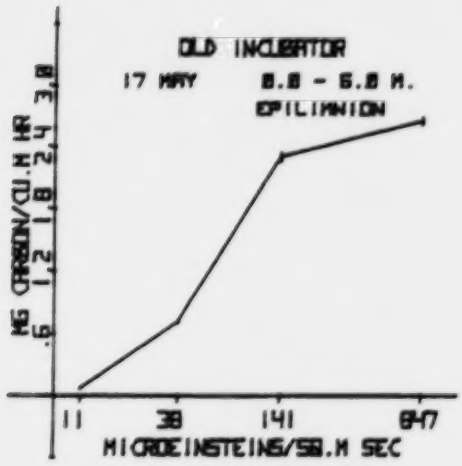

NEW INCUBATOR
28 SEP 8.8 - 18.8 M.
EPILIMNION
MG CARBON/CU.M HR
2.8 4.8 6.8 8.8 10.8
5 22 89 387
MICROEINSTEINS/SQ.M SEC

LAKE 223


NEW INCUBATOR
12 OCT 0.0 - 0.0 M.
EPILIMNION
MG CARBON/CU.M HR
2 4 7 9 11
7 28 96 385
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
27 OCT 0.0 - 0.0 M.
EPILIMNION
MG CARBON/CU.M HR
1.6 3.2 4.8 6.4 8.0
8 34 120 480
MICROEINSTEINS/SQ.M SEC

LAKE 224


OLD INCUBATOR
17 MAY 8.8 - 6.8 M.
EPILIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.8
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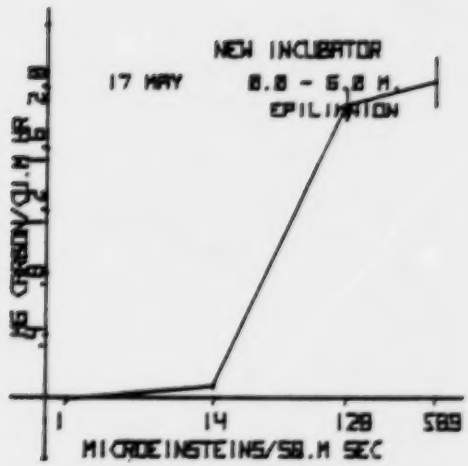
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
17 MAY 8.8 - 6.8 M.
EPILIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.8
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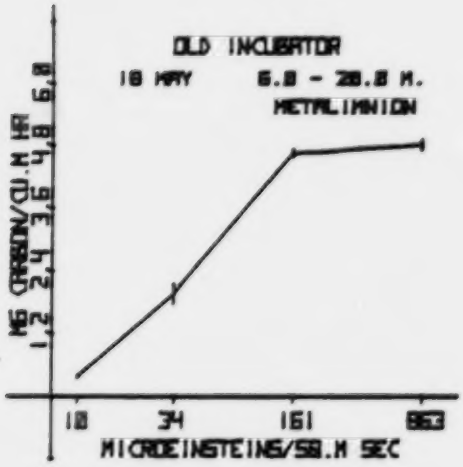
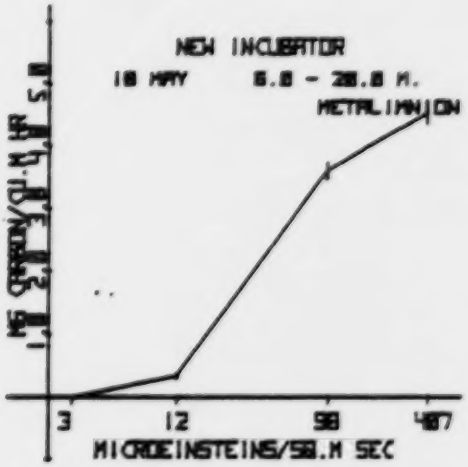
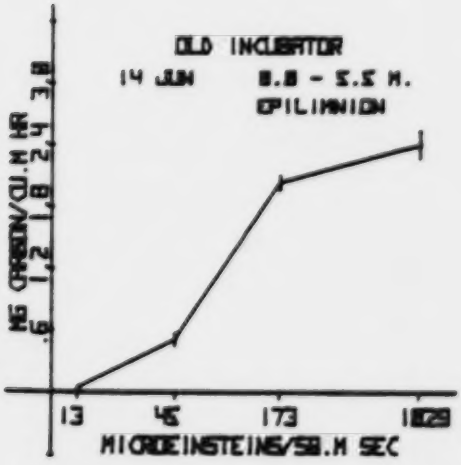
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
18 MAY 6.8 - 28.8 M.
METALIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.8
18 34 161 863
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
18 MAY 6.8 - 28.8 M.
METALIMNION
MG CARBON/CU.M HR
1.1 2.2 3.3 4.4 5.8
3 12 98 487
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
14 JUN 8.8 - 5.5 M.
EPILIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.8
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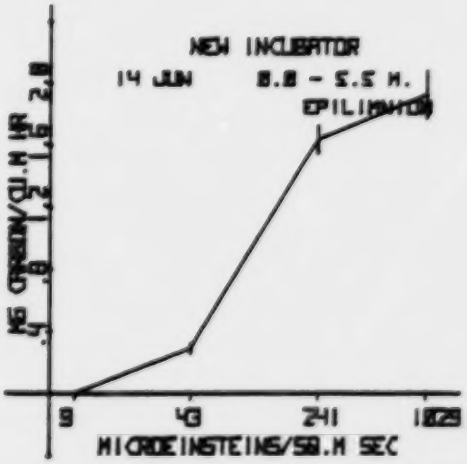
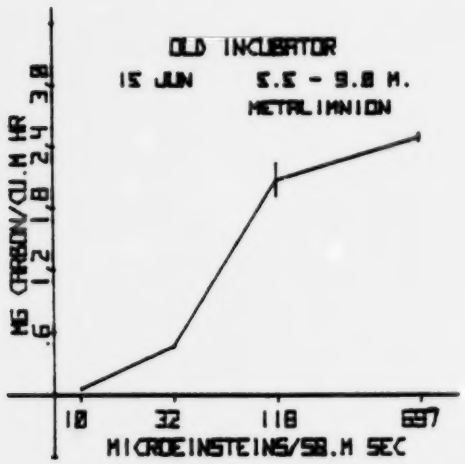
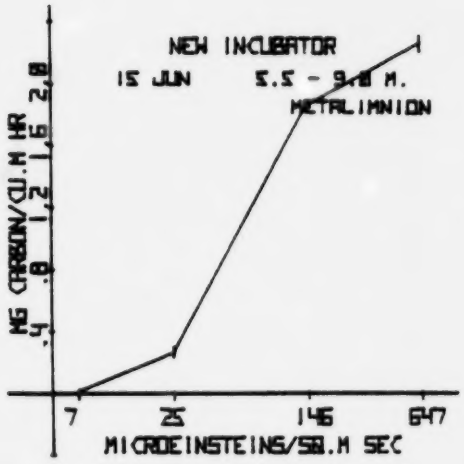
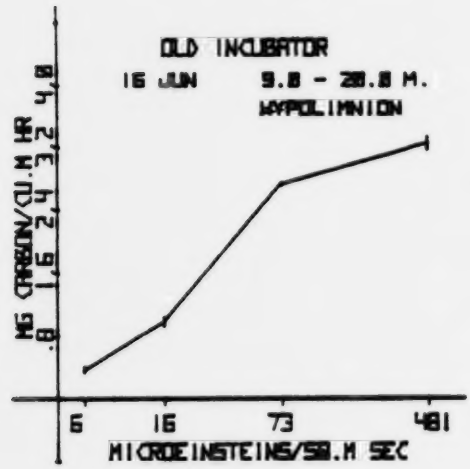
MICROEINSTEINS/SQ.M SEC

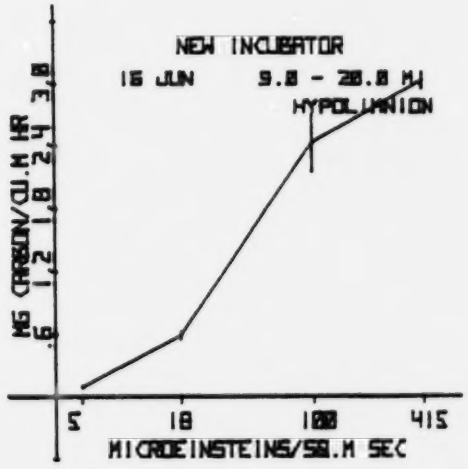

NEW INCUBATOR
14 JUN 8.8 - 5.5 M.
EPILIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.8
9 43 241 1829
MICROEINSTEINS/SQ.M SEC

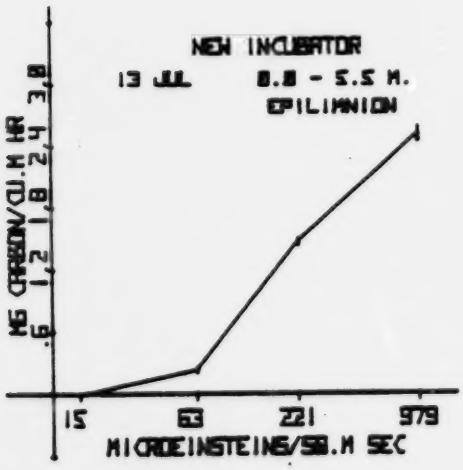
LAKE 224

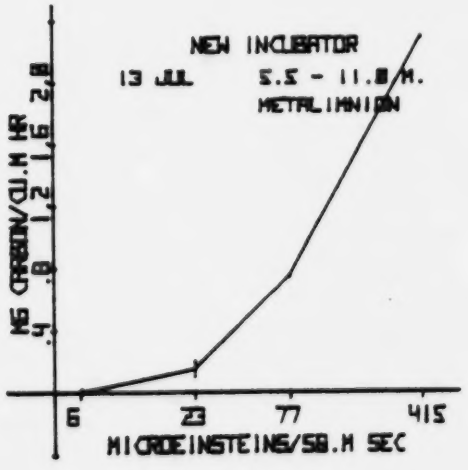

OLD INCUBATOR
15 JUN 5.5 - 9.8 M.
METALIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
10 32 118 697
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
15 JUN 5.5 - 9.8 M.
METALIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.0
7 25 146 647
MICROEINSTEINS/SQ.M SEC

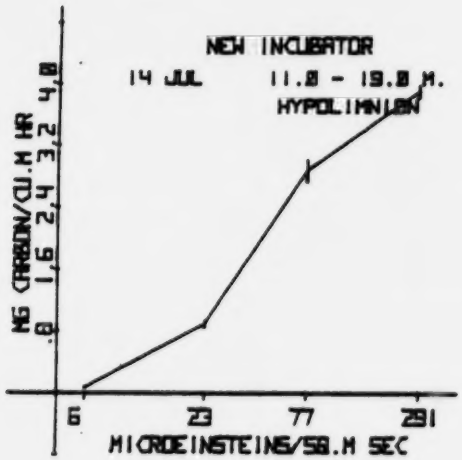

OLD INCUBATOR
16 JUN 9.8 - 20.8 M.
HYPOLIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
6 16 73 481
MICROEINSTEINS/SQ.M SEC

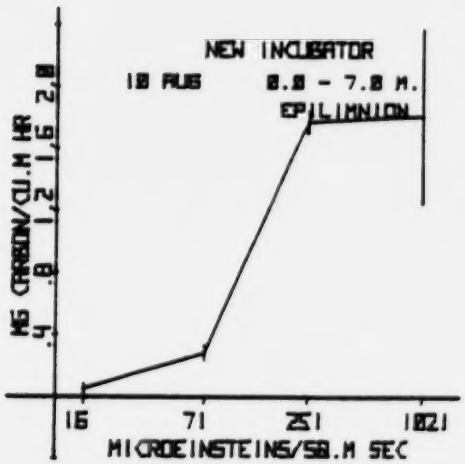

NEW INCUBATOR
16 JUN 9.8 - 20.8 M.
HYPOLIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
5 18 100 415
MICROEINSTEINS/SQ.M SEC

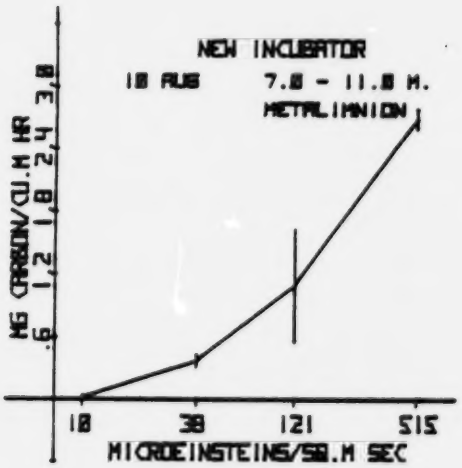

NEW INCUBATOR
13 JUL 0.8 - 5.5 M.
EPILIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
15 63 221 979
MICROEINSTEINS/SQ.M SEC

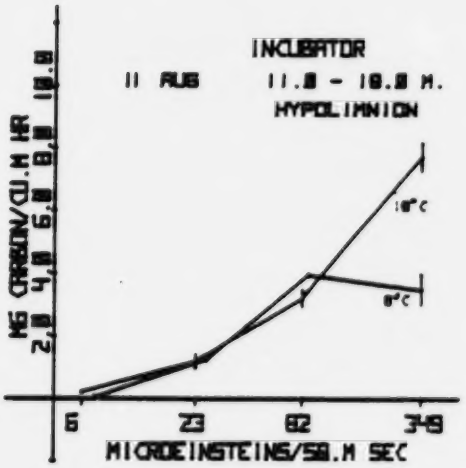

NEW INCUBATOR
13 JUL 5.5 - 11.8 M.
METALIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.0
6 23 77 415
MICROEINSTEINS/SQ.M SEC

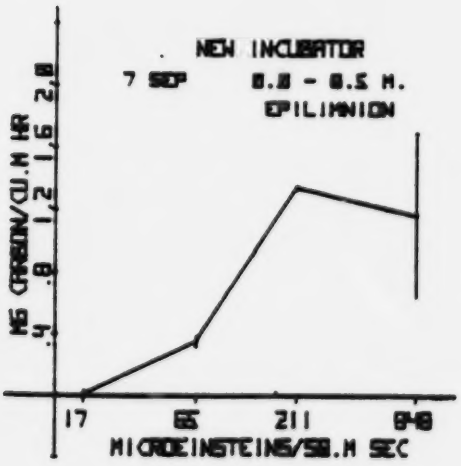
LAKE 224

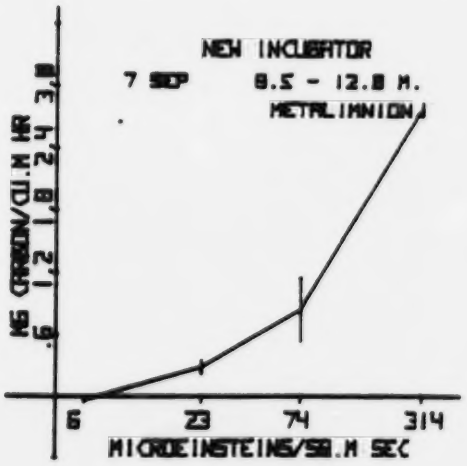

NEW INCUBATOR
14 JUL 11.8 - 19.8 M.
HYPOLIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.8
6 23 77 291
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
18 AUG 0.0 - 7.8 M.
EPILIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.8
16 71 251 1021
MICROEINSTEINS/SQ.M SEC

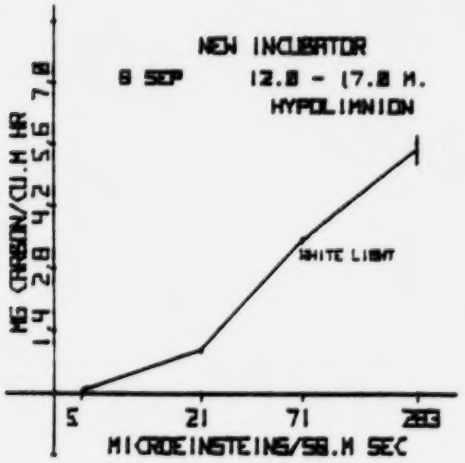

NEW INCUBATOR
18 AUG 7.8 - 11.8 M.
METALIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.8
18 38 121 515
MICROEINSTEINS/SQ.M SEC

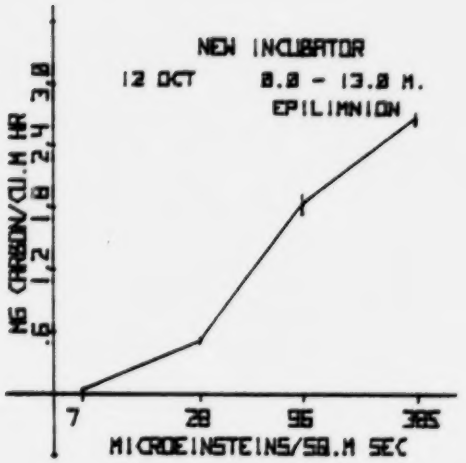

INCUBATOR
11 AUG 11.8 - 18.8 M.
HYPOLIMNION
MG CARBON/CU.M HR
2.8 4.8 6.8 8.8 10.8
18°C
8°C
6 23 82 349
MICROEINSTEINS/SQ.M SEC

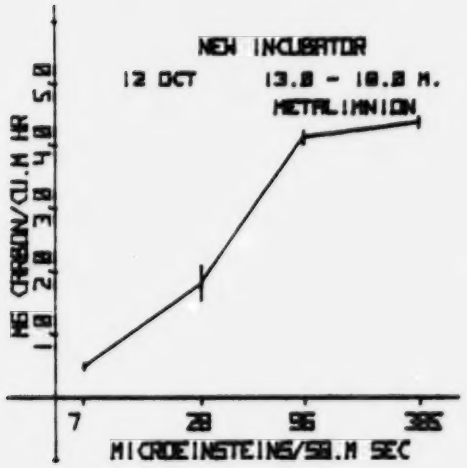

NEW INCUBATOR
7 SEP 0.0 - 8.5 M.
EPILIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.8
17 65 211 848
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
7 SEP 8.5 - 12.8 M.
METALIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.8
6 23 74 314
MICROEINSTEINS/SQ.M SEC

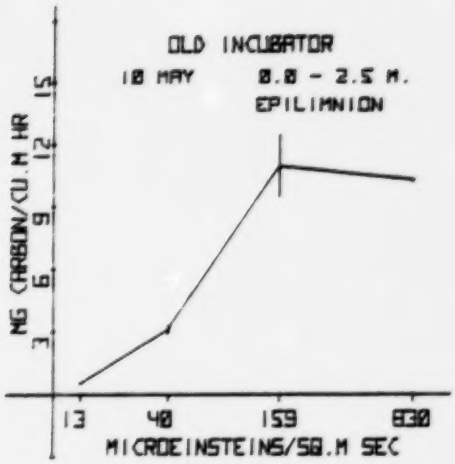
LAKE 224

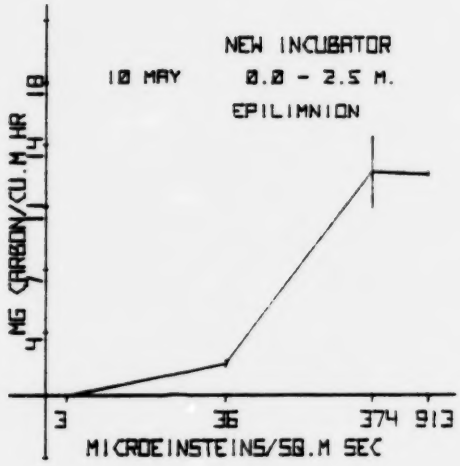

NEW INCUBATOR
8 SEP 12.8 - 17.8 M.
HYPOLIMNION
MG CARBON/CU.M HR
1.4 2.8 4.2 5.6 7.0
WHITE LIGHT
5 21 71 283
MICROEINSTEINS/SQ.M SEC

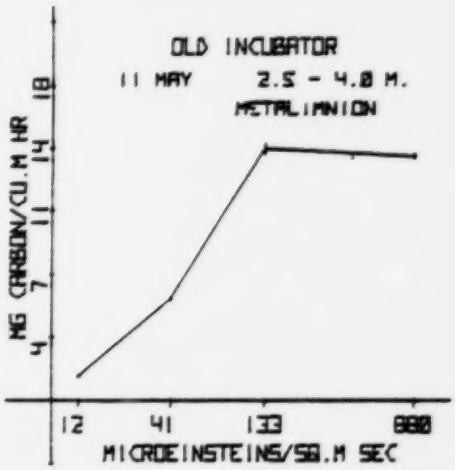

NEW INCUBATOR
12 OCT 8.8 - 13.8 M.
EPILIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
7 28 96 385
MICROEINSTEINS/SQ.M SEC

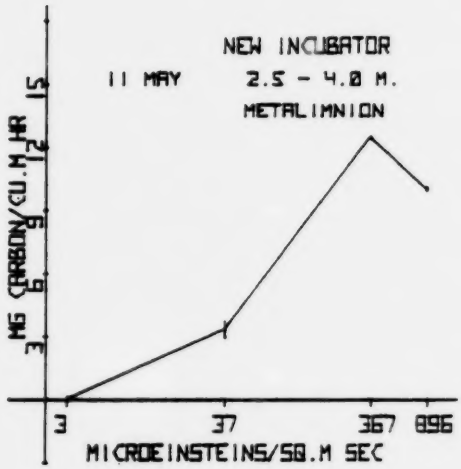

NEW INCUBATOR
12 OCT 13.8 - 18.8 M.
METALIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
7 28 96 385
MICROEINSTEINS/SQ.M SEC

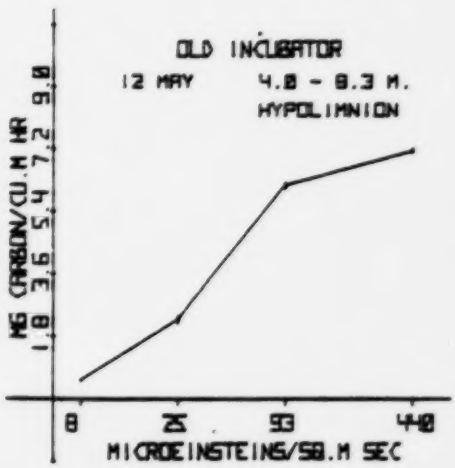
LAKE 226 NE

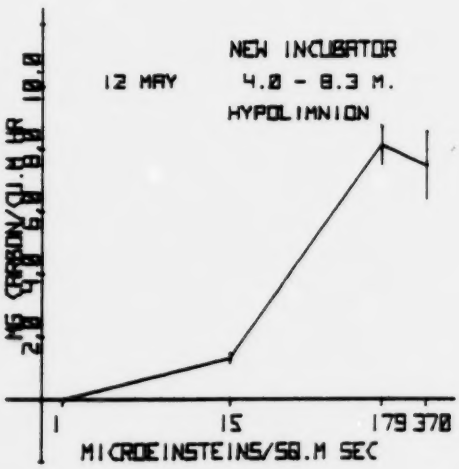

OLD INCUBATOR
10 MAY 0.0 - 2.5 M.
EPILIMNION
MG CARBON/CU.M HR
3 6 9 12 15
13 40 159 830
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
10 MAY 0.0 - 2.5 M.
EPILIMNION
MG CARBON/CU.M HR
4 7 10 13 16
3 36 374 913
MICROEINSTEINS/SQ.M SEC

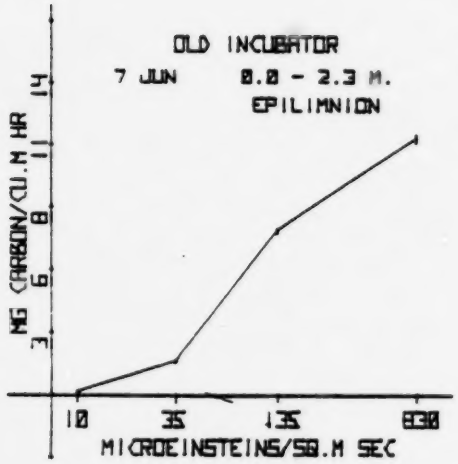

OLD INCUBATOR
11 MAY 2.5 - 4.0 M.
METALIMNION
MG CARBON/CU.M HR
4 7 11 14 18
12 41 133 880
MICROEINSTEINS/SQ.M SEC

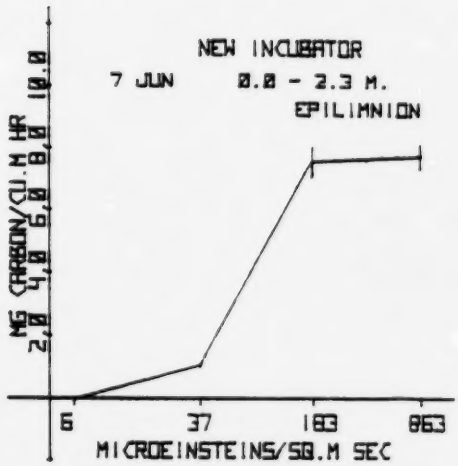

NEW INCUBATOR
11 MAY 2.5 - 4.0 M.
METALIMNION
MG CARBON/CU.M HR
3 6 9 12 15
3 37 367 896
MICROEINSTEINS/SQ.M SEC

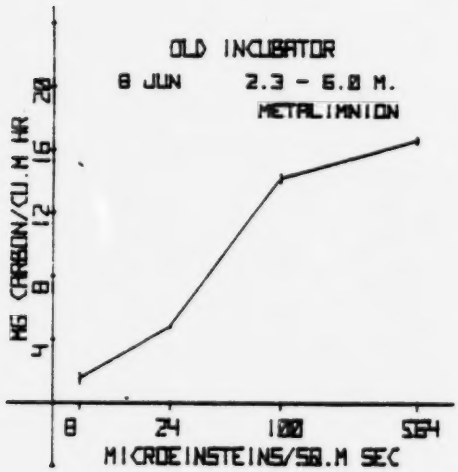

OLD INCUBATOR
12 MAY 4.0 - 8.3 M.
HYPOLIMNION
MG CARBON/CU.M HR
1.8 3.6 5.4 7.2 9.0
8 25 93 440
MICROEINSTEINS/SQ.M SEC

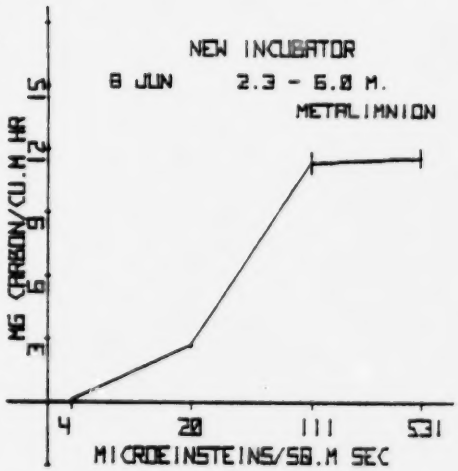

NEW INCUBATOR
12 MAY 4.0 - 8.3 M.
HYPOLIMNION
MG CARBON/CU.M HR
1 15 179 370
MICROEINSTEINS/SQ.M SEC

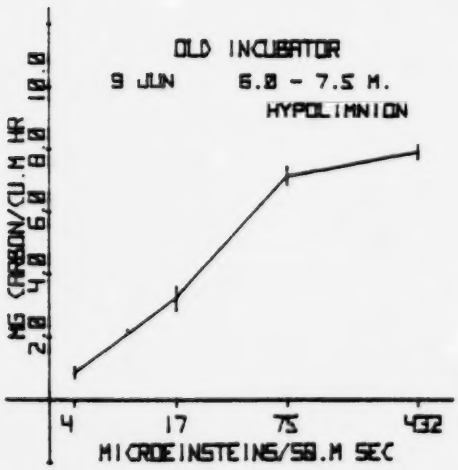
LAKE 226 NE

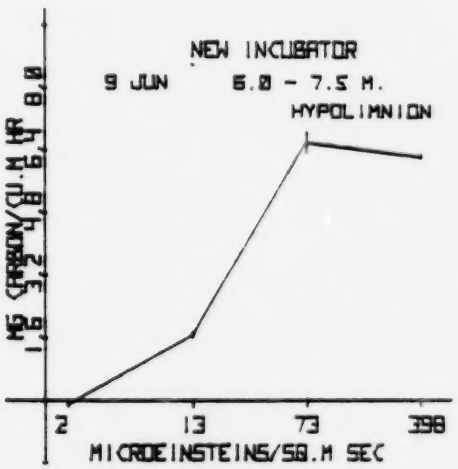

OLD INCUBATOR
7 JUN 0.0 - 2.3 M.
EPILIMNION
MG CARBON/CU.M HR
3
6
8
11
14
10
35
135
830
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
7 JUN 0.0 - 2.3 M.
EPILIMNION
MG CARBON/CU.M HR
2.0
4.0
6.0
8.0
10.0
6
37
183
863
MICROEINSTEINS/SQ.M SEC

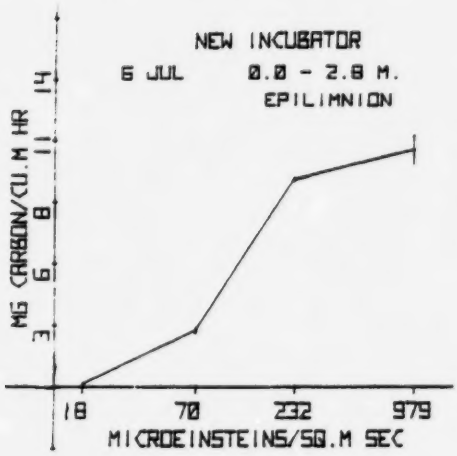

OLD INCUBATOR
8 JUN 2.3 - 6.0 M.
METALIMNION
MG CARBON/CU.M HR
4
8
12
16
20
8
24
100
564
MICROEINSTEINS/SQ.M SEC

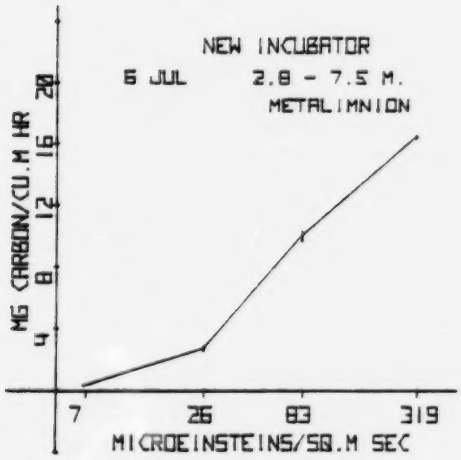

NEW INCUBATOR
8 JUN 2.3 - 6.0 M.
METALIMNION
MG CARBON/CU.M HR
3
6
9
12
15
4
20
111
531
MICROEINSTEINS/SQ.M SEC

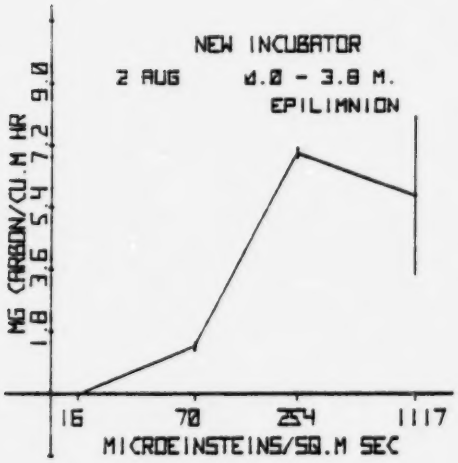

OLD INCUBATOR
9 JUN 6.0 - 7.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
2.0
4.0
6.0
8.0
10.0
4
17
75
432
MICROEINSTEINS/SQ.M SEC

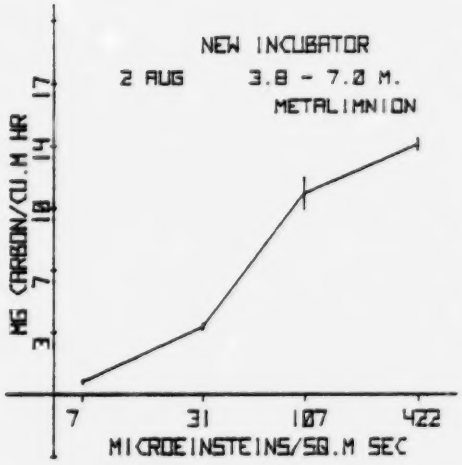

NEW INCUBATOR
9 JUN 6.0 - 7.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
1
2.3
4
6.8
8.0
2
13
73
398
MICROEINSTEINS/SQ.M SEC

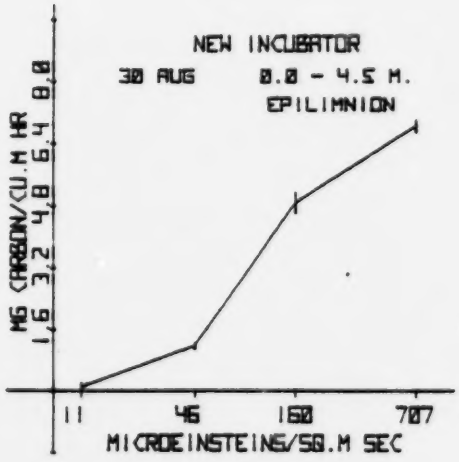
LAKE 225 NE

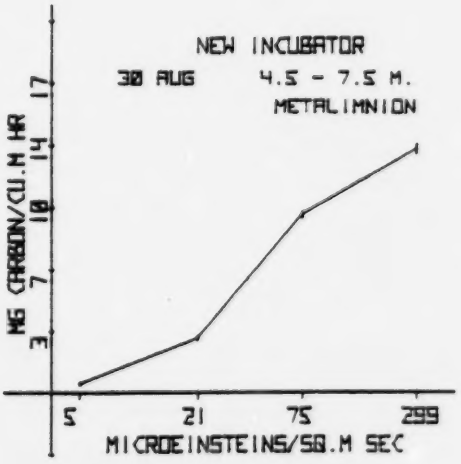

NEW INCUBATOR
6 JUL 0.0 - 2.8 M.
EPILIMNION
MG CARBON/CU.M HR
3 6 8 11 14
18 70 232 979
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
6 JUL 2.8 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
4 8 12 16 20
7 26 83 319
MICROEINSTEINS/SQ.M SEC

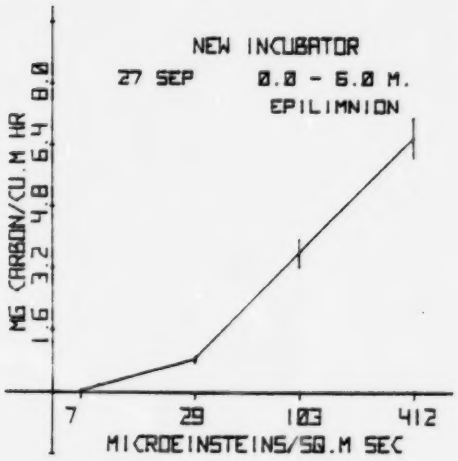

NEW INCUBATOR
2 AUG 0.0 - 3.8 M.
EPILIMNION
MG CARBON/CU.M HR
1.8 3.6 5.4 7.2 9.0
16 70 254 1117
MICROEINSTEINS/SQ.M SEC

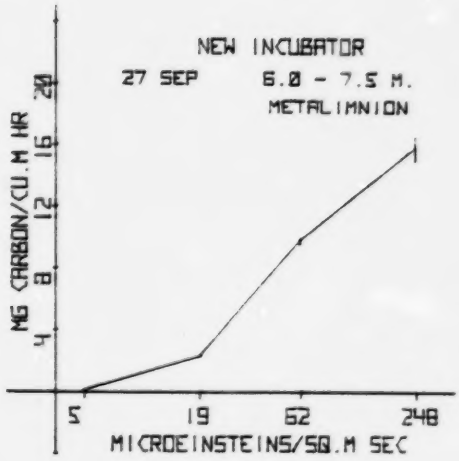

NEW INCUBATOR
2 AUG 3.8 - 7.0 M.
METALIMNION
MG CARBON/CU.M HR
3 7 10 14 17
7 31 107 422
MICROEINSTEINS/SQ.M SEC

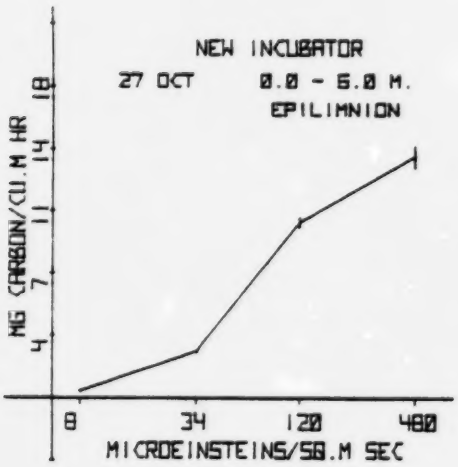

NEW INCUBATOR
30 AUG 0.0 - 4.5 M.
EPILIMNION
MG CARBON/CU.M HR
1.6 3.2 4.8 6.4 8.0
11 46 180 707
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
30 AUG 4.5 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
3 7 10 14 17
5 21 75 299
MICROEINSTEINS/SQ.M SEC

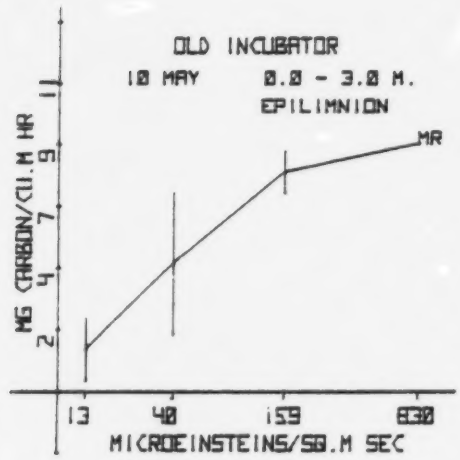
LAKE 226 NE

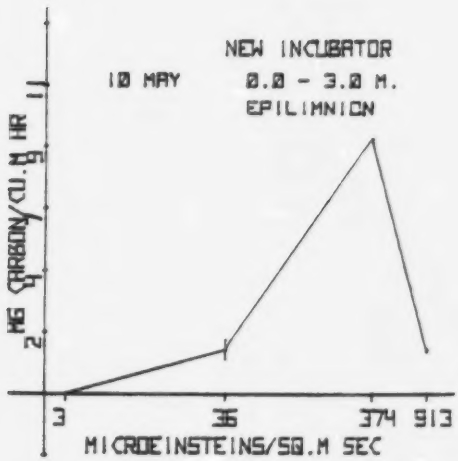

NEW INCUBATOR
27 SEP 0.0 - 6.0 M.
EPILIMNION
MG CARBON/CU.M HR
1.6
3.2
4.8
6.4
8.0
7
29
103
412
MICROEINSTEINS/SQ.M SEC

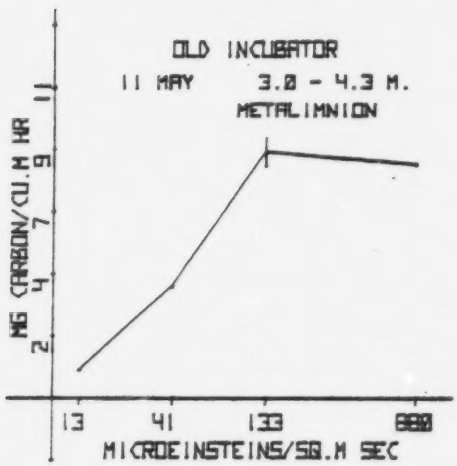

NEW INCUBATOR
27 SEP 6.0 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
4
8
12
16
20
5
19
62
248
MICROEINSTEINS/SQ.M SEC

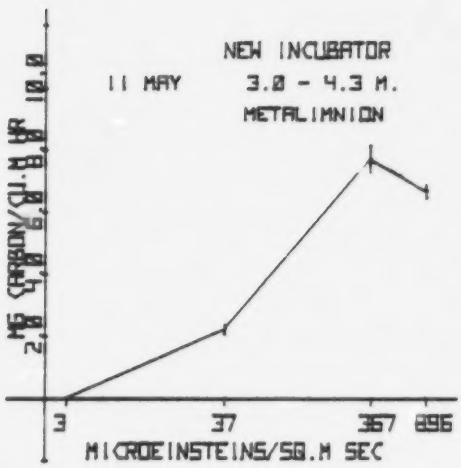

NEW INCUBATOR
27 OCT 0.0 - 6.0 M.
EPILIMNION
MG CARBON/CU.M HR
4
7
11
14
18
8
34
120
480
MICROEINSTEINS/SQ.M SEC

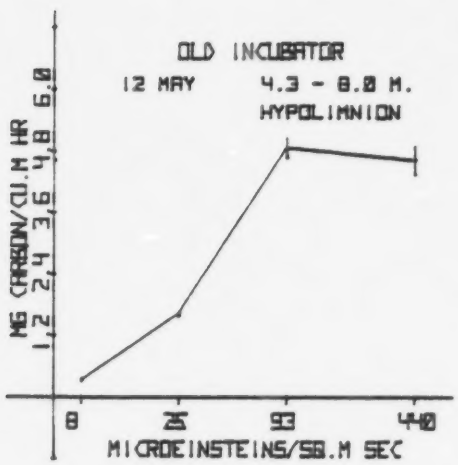
LAKE 226 SW

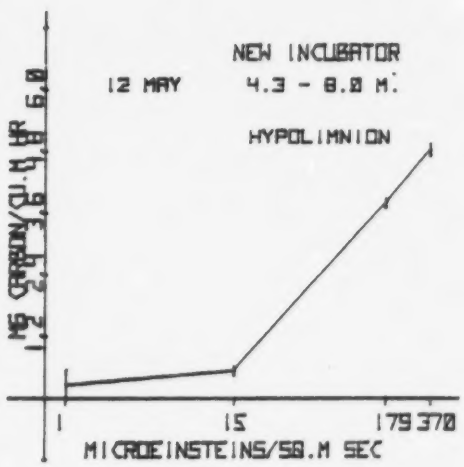

OLD INCUBATOR
10 MAY 0.0 - 3.0 M.
EPILIMNION
MR
MG CARBON/CU.M HR
2 4 7 9 11
13 40 159 830
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
10 MAY 0.0 - 3.0 M.
EPILIMNION
MG CARBON/CU.M HR
2 4 11
3 36 374 913
MICROEINSTEINS/SQ.M SEC

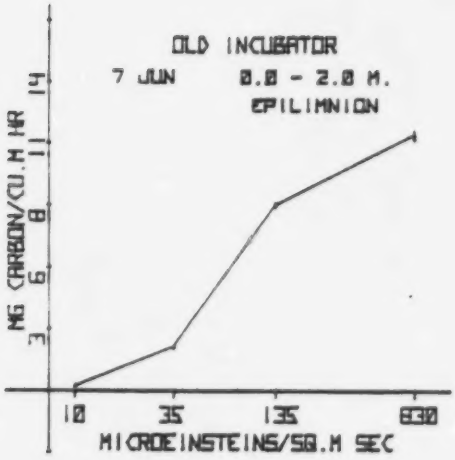

OLD INCUBATOR
11 MAY 3.0 - 4.3 M.
METALIMNION
MG CARBON/CU.M HR
2 4 7 9 11
13 41 133 888
MICROEINSTEINS/SQ.M SEC

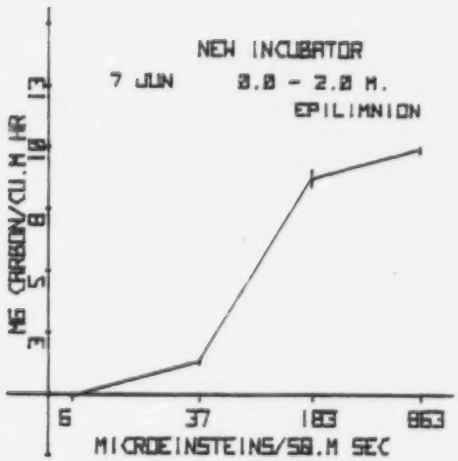

NEW INCUBATOR
11 MAY 3.0 - 4.3 M.
METALIMNION
MG CARBON/CU.M HR
2,0 4,0 6,0 8,0 10,0
3 37 367 896
MICROEINSTEINS/SQ.M SEC

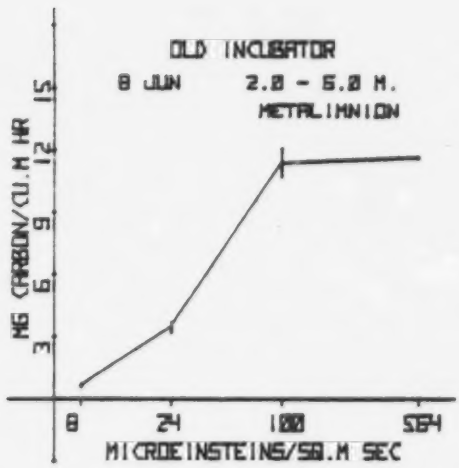

OLD INCUBATOR
12 MAY 4.3 - 8.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
1,2 2,4 3,6 4,8 6,0
8 25 93 440
MICROEINSTEINS/SQ.M SEC

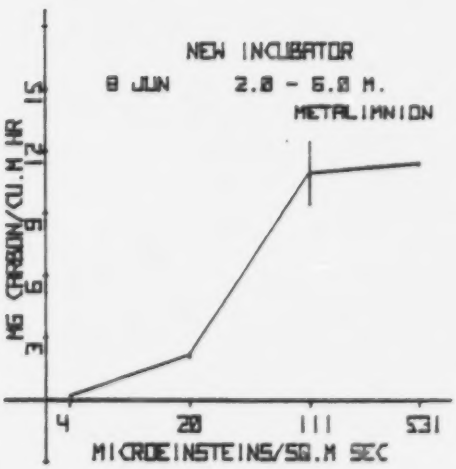

NEW INCUBATOR
12 MAY 4.3 - 8.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
1,2 2,5 6,0
1 15 179 370
MICROEINSTEINS/SQ.M SEC

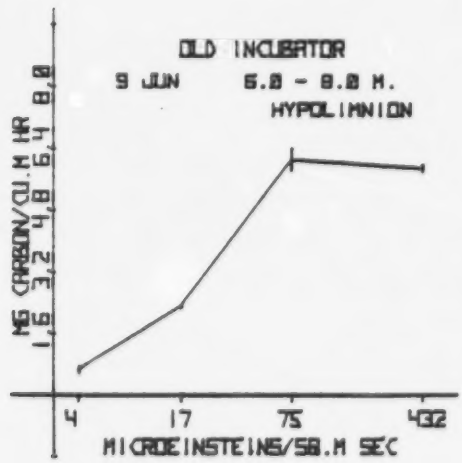
LAKE 226 SW

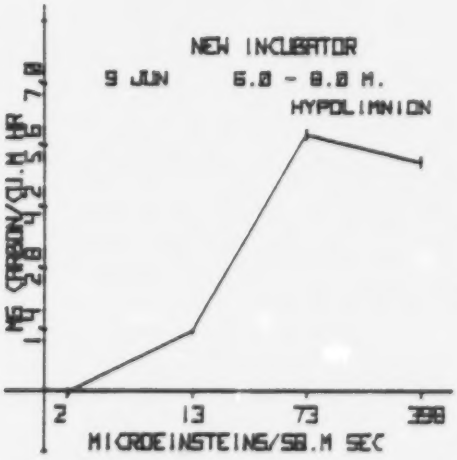

OLD INCUBATOR
7 JUN 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
3
6
8
11
14
10
35
135
830
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
7 JUN 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
3
5
8
10
13
6
37
183
863
MICROEINSTEINS/SQ.M SEC

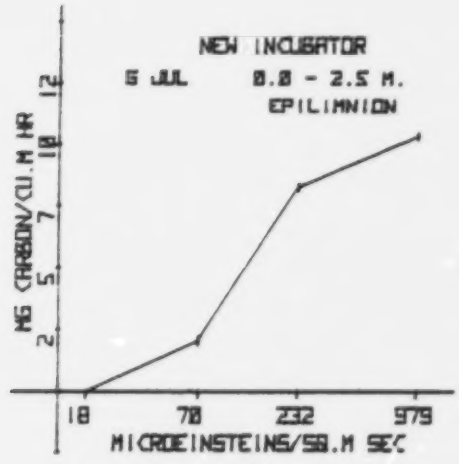

OLD INCUBATOR
8 JUN 2.0 - 6.0 M.
METALIMNION
MG CARBON/CU.M HR
3
6
9
12
15
8
24
100
564
MICROEINSTEINS/SQ.M SEC

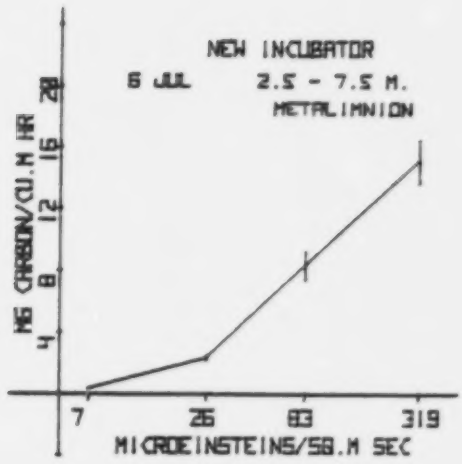

NEW INCUBATOR
8 JUN 2.0 - 6.0 M.
METALIMNION
MG CARBON/CU.M HR
3
6
9
12
15
4
20
111
531
MICROEINSTEINS/SQ.M SEC

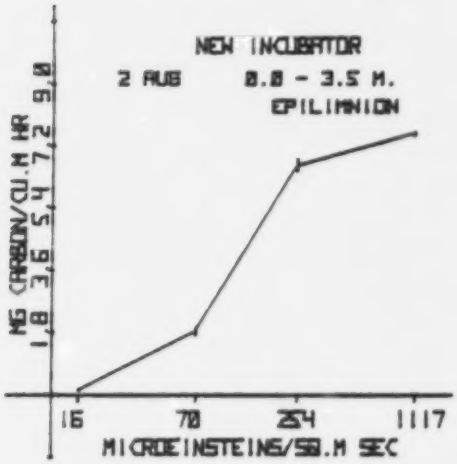

OLD INCUBATOR
9 JUN 6.0 - 8.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
1,6
3,2
4,8
6,4
8,0
4
17
75
432
MICROEINSTEINS/SQ.M SEC

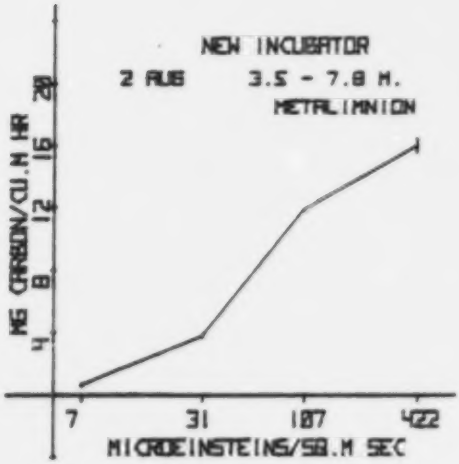

NEW INCUBATOR
9 JUN 6.0 - 8.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
1,4
2,8
4,2
5,6
7,0
2
13
73
398
MICROEINSTEINS/SQ.M SEC

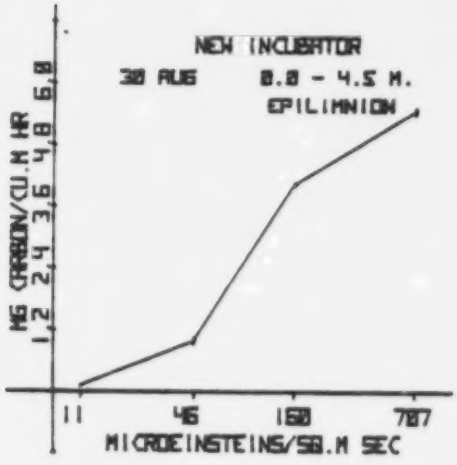
LAKE 226 SW

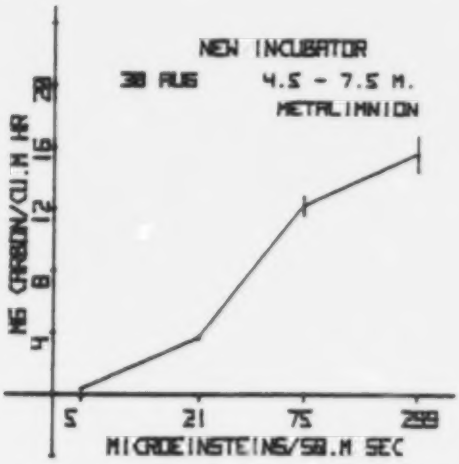

NEW INCUBATOR
6 JUL 0.0 - 2.5 M.
EPILIMNION
MG CARBON/CU.M HR
2 5 7 10 12
18 70 232 979
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
6 JUL 2.5 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
4 8 12 16 20
7 26 83 319
MICROEINSTEINS/SQ.M SEC

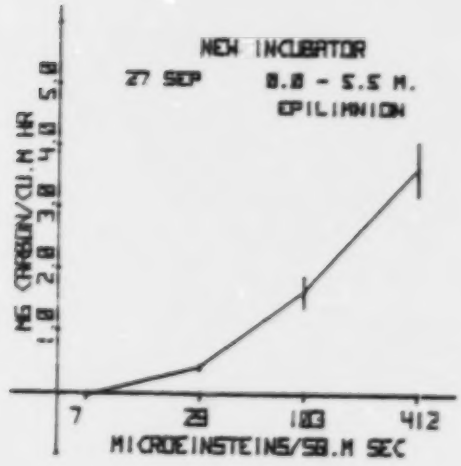

NEW INCUBATOR
2 AUG 0.0 - 3.5 M.
EPILIMNION
MG CARBON/CU.M HR
1,8 3,6 5,4 7,2 9,0
16 70 254 1117
MICROEINSTEINS/SQ.M SEC

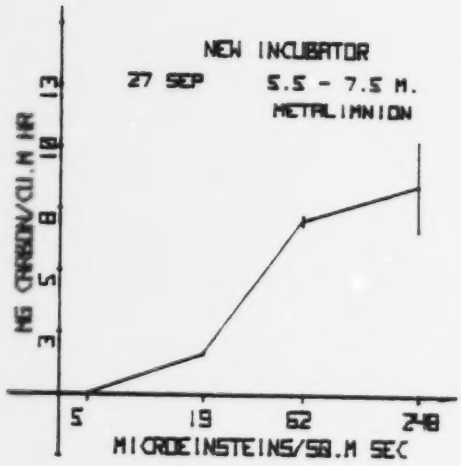

NEW INCUBATOR
2 AUG 3.5 - 7.0 M.
METALIMNION
MG CARBON/CU.M HR
4 8 12 16 20
7 31 107 422
MICROEINSTEINS/SQ.M SEC

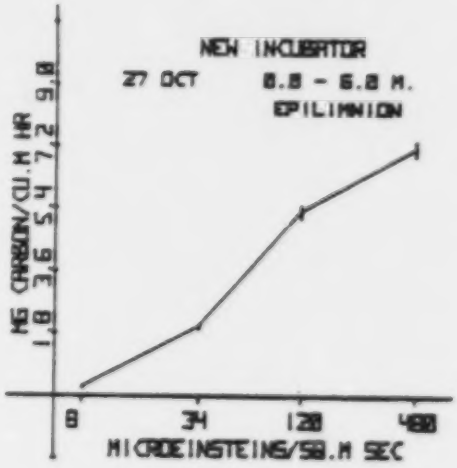

NEW INCUBATOR
30 AUG 0.0 - 4.5 M.
EPILIMNION
MG CARBON/CU.M HR
1,2 2,4 3,6 4,8 6,0
11 46 188 787
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
30 AUG 4.5 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
4 8 12 16 20
5 21 75 299
MICROEINSTEINS/SQ.M SEC

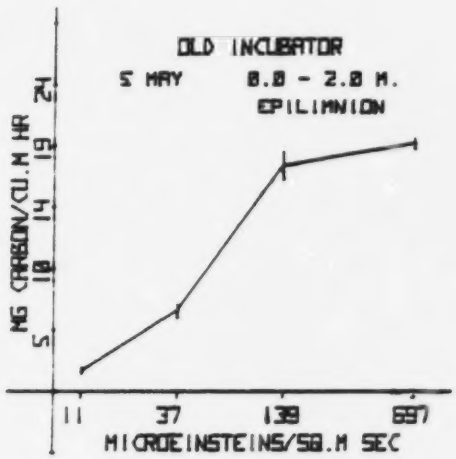
LAKE 226 SW

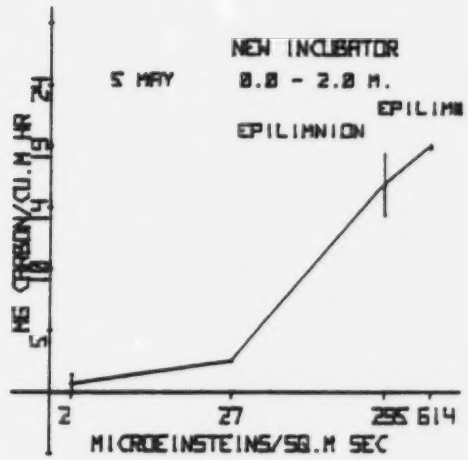

NEW INCUBATOR
27 SEP 0.0 - 5.5 M.
EPILIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
7 29 103 412
MICROEINSTEINS/SQ.M SEC

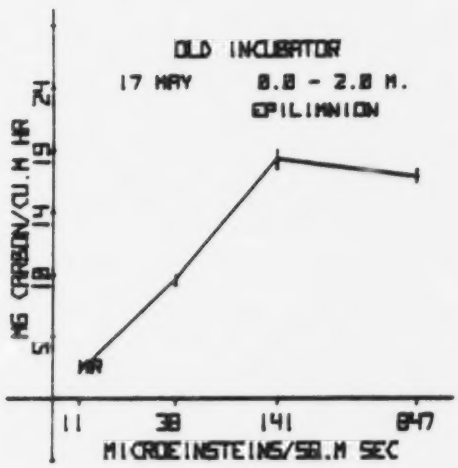

NEW INCUBATOR
27 SEP 5.5 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
3 5 8 10 13
5 19 62 248
MICROEINSTEINS/SQ.M SEC

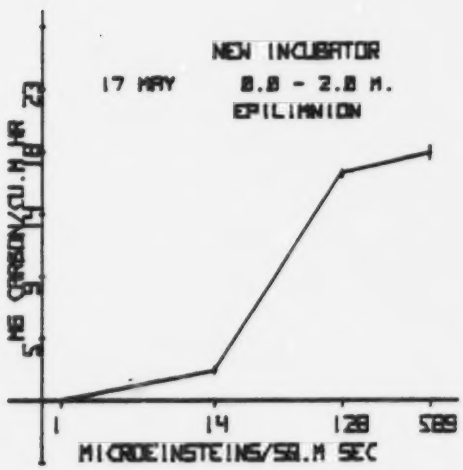

NEW INCUBATOR
27 OCT 0.0 - 6.0 M.
EPILIMNION
MG CARBON/CU.M HR
1.8 3.6 5.4 7.2 9.0
8 34 128 480
MICROEINSTEINS/SQ.M SEC

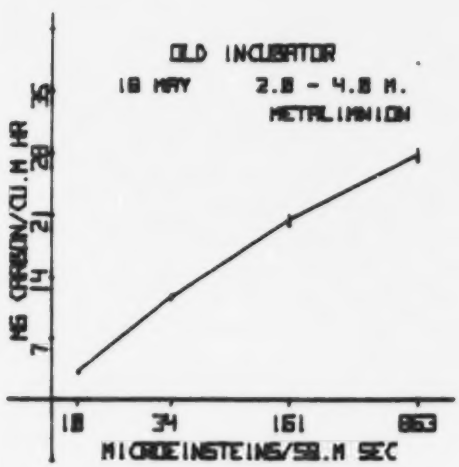
LAKE 227


OLD INCUBATOR
5 MAY 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
5
10
14
19
24
11
37
139
697
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
5 MAY 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
5
10
14
19
24
2
27
295
614
MICROEINSTEINS/SQ.M SEC

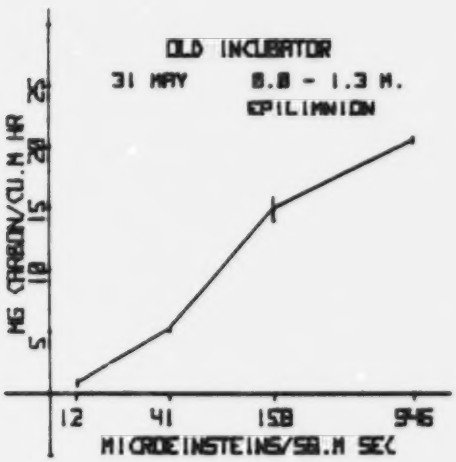

OLD INCUBATOR
17 MAY 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
5
10
14
19
24
11
38
141
847
MICROEINSTEINS/SQ.M SEC

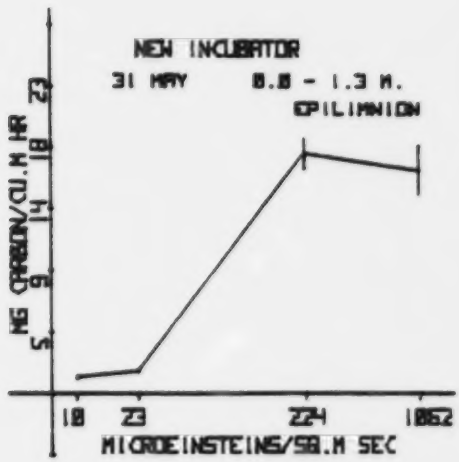

NEW INCUBATOR
17 MAY 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
5
10
14
19
23
1
14
128
589
MICROEINSTEINS/SQ.M SEC

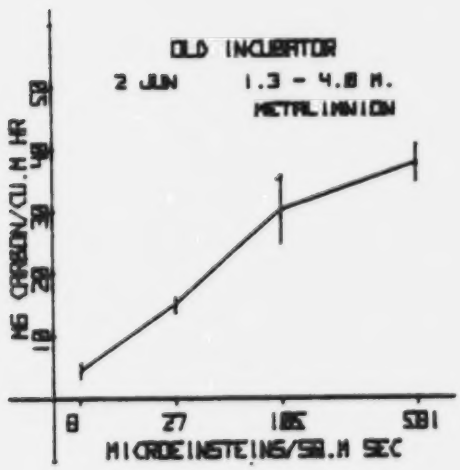

OLD INCUBATOR
18 MAY 2.0 - 4.0 M.
METALIMNION
MG CARBON/CU.M HR
7
14
21
28
35
18
34
161
863
MICROEINSTEINS/SQ.M SEC

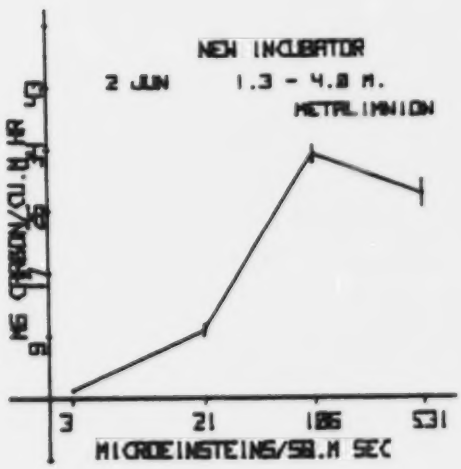
NEW INCUBATOR
18 MAY 2.0 - 4.0 M.
METALIMNION
MG CARBON/CU.M HR
6
12
19
25
31
3
12
58
487
MICROEINSTEINS/SQ.M SEC

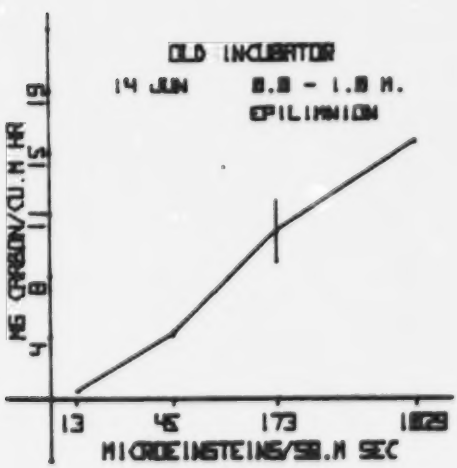
LAKE 227

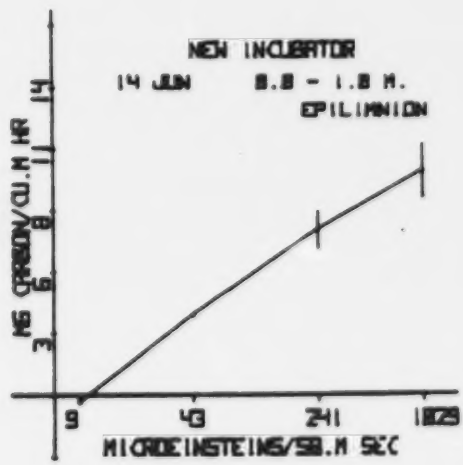

OLD INCUBATOR
31 MAY 8.8 - 1.3 M.
EPILIMNION
MG CARBON/CU.M HR
12 41 158 946
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
31 MAY 8.8 - 1.3 M.
EPILIMNION
MG CARBON/CU.M HR
18 23 224 1862
MICROEINSTEINS/SQ.M SEC

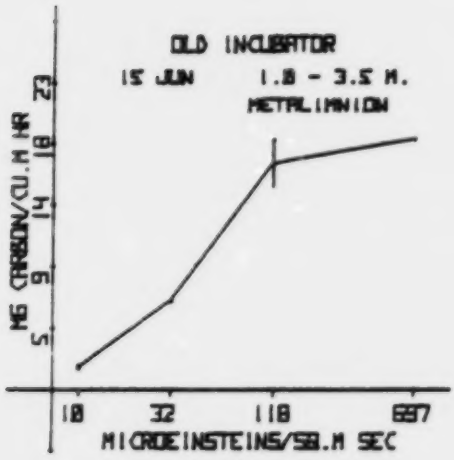

OLD INCUBATOR
2 JUN 1.3 - 4.8 M.
METALIMNION
MG CARBON/CU.M HR
8 27 185 581
MICROEINSTEINS/SQ.M SEC

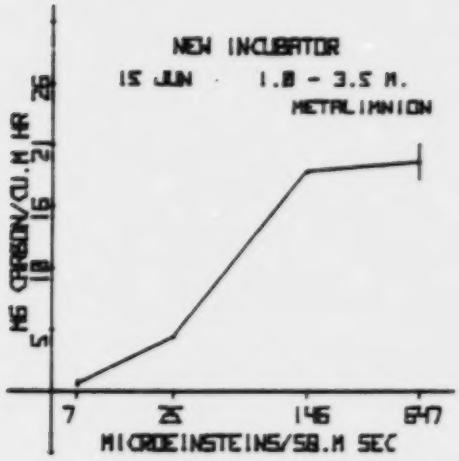

NEW INCUBATOR
2 JUN 1.3 - 4.8 M.
METALIMNION
MG CARBON/CU.M HR
3 21 186 531
MICROEINSTEINS/SQ.M SEC

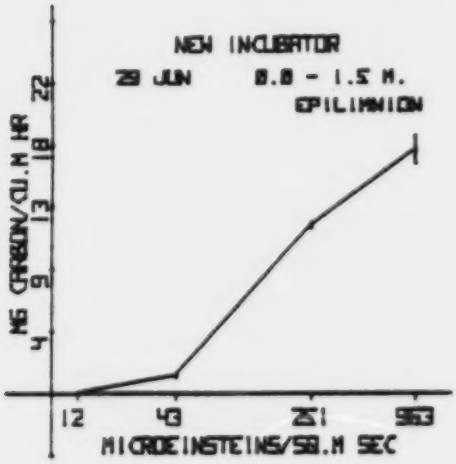

OLD INCUBATOR
14 JUN 8.8 - 1.8 M.
EPILIMNION
MG CARBON/CU.M HR
13 45 173 1029
MICROEINSTEINS/SQ.M SEC

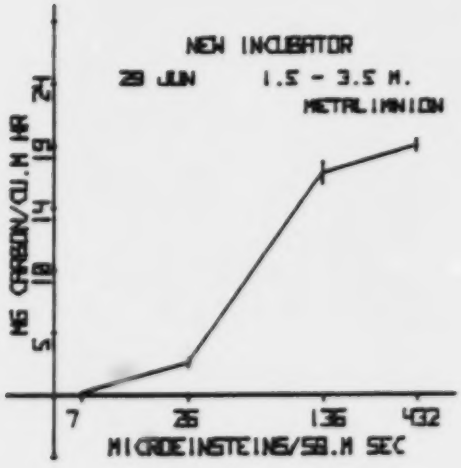

NEW INCUBATOR
14 JUN 8.8 - 1.8 M.
EPILIMNION
MG CARBON/CU.M HR
9 43 241 1029
MICROEINSTEINS/SQ.M SEC

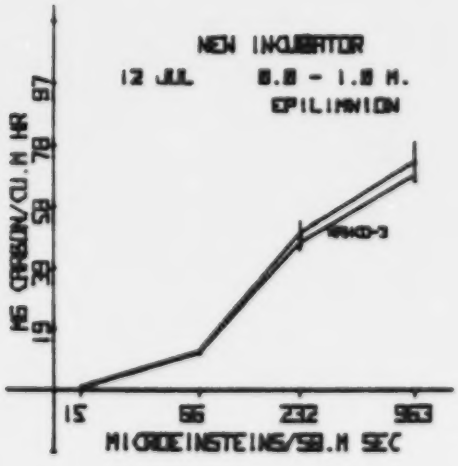
LAKE 227

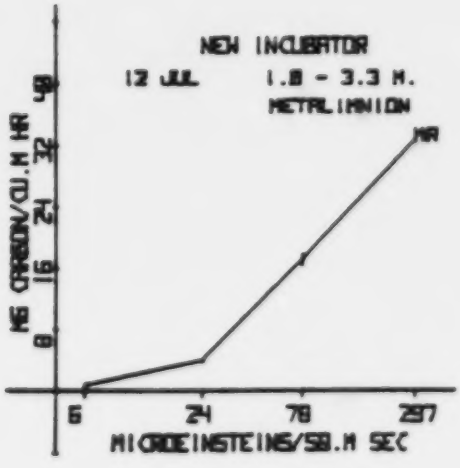

OLD INCUBATOR
15 JUN 1.8 - 3.5 M.
METALIMNION
MG CARBON/CU.M HR
5 9 14 18 23
18 32 118 697
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
15 JUN 1.8 - 3.5 M.
METALIMNION
MG CARBON/CU.M HR
5 10 16 21 26
7 25 146 647
MICROEINSTEINS/SQ.M SEC

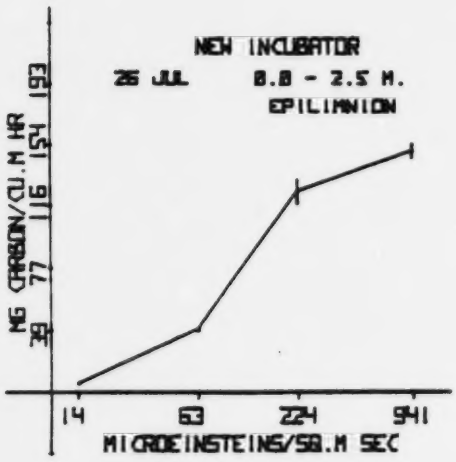

NEW INCUBATOR
29 JUN 0.8 - 1.5 M.
EPILIMNION
MG CARBON/CU.M HR
4 9 13 18 22
12 43 251 963
MICROEINSTEINS/SQ.M SEC

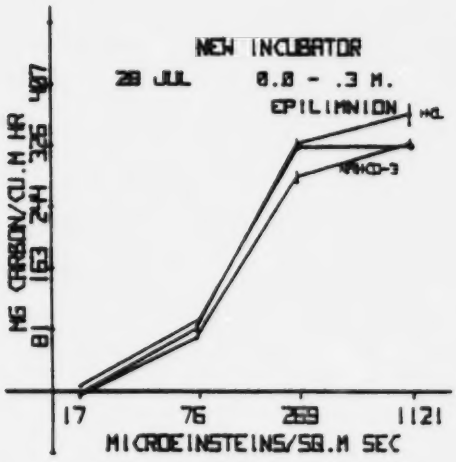

NEW INCUBATOR
29 JUN 1.5 - 3.5 M.
METALIMNION
MG CARBON/CU.M HR
5 10 14 19 24
7 26 136 432
MICROEINSTEINS/SQ.M SEC

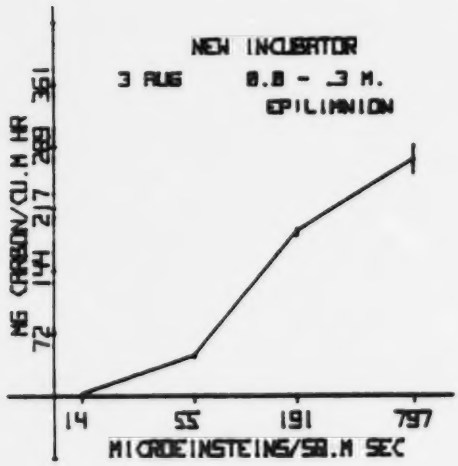

NEW INCUBATOR
12 JUL 0.8 - 1.8 M.
EPILIMNION
MG CARBON/CU.M HR
19 39 58 78 97
15 66 232 963
MICROEINSTEINS/SQ.M SEC

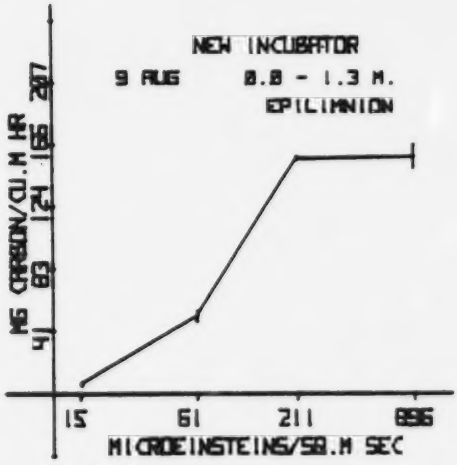

NEW INCUBATOR
12 JUL 1.8 - 3.3 M.
METALIMNION
MG CARBON/CU.M HR
0 16 24 32 48
6 24 78 297
MICROEINSTEINS/SQ.M SEC

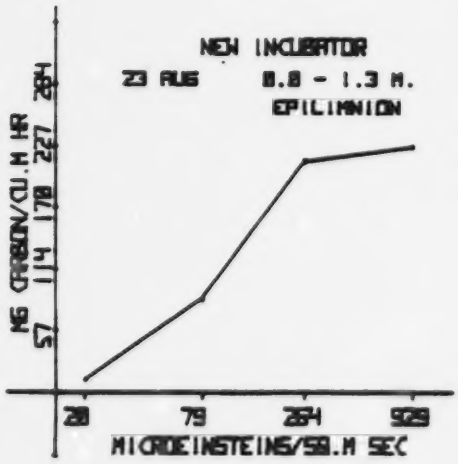
LAKE 227

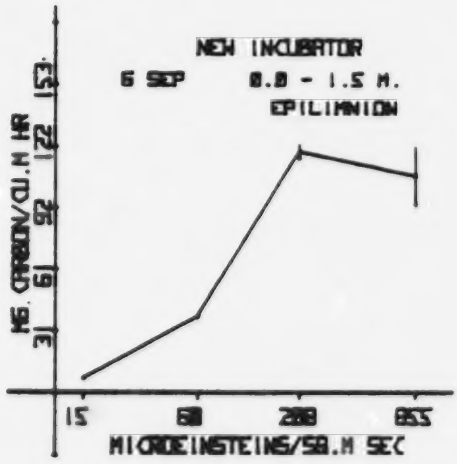

NEW INCUBATOR
26 JUL 0.0 - 2.5 M.
EPILIMNION
MG CARBON/CU.M HR
39 77 116 154 193
14 63 224 941
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
28 JUL 0.0 - .3 M.
EPILIMNION
MG CARBON/CU.M HR
81 163 244 326 407
17 76 269 1121
MICROEINSTEINS/SQ.M SEC

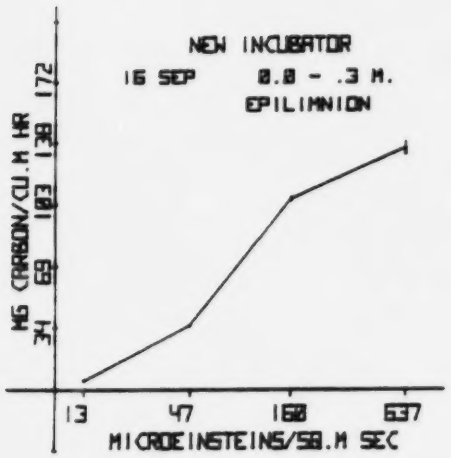

NEW INCUBATOR
3 AUG 0.0 - .3 M.
EPILIMNION
MG CARBON/CU.M HR
72 144 217 289 361
14 55 191 797
MICROEINSTEINS/SQ.M SEC

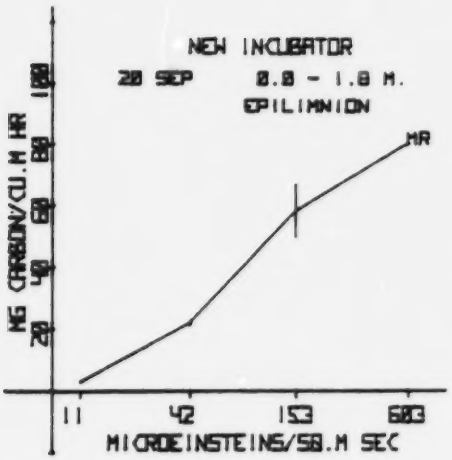

NEW INCUBATOR
9 AUG 0.0 - 1.3 M.
EPILIMNION
MG CARBON/CU.M HR
41 83 124 166 207
15 61 211 896
MICROEINSTEINS/SQ.M SEC

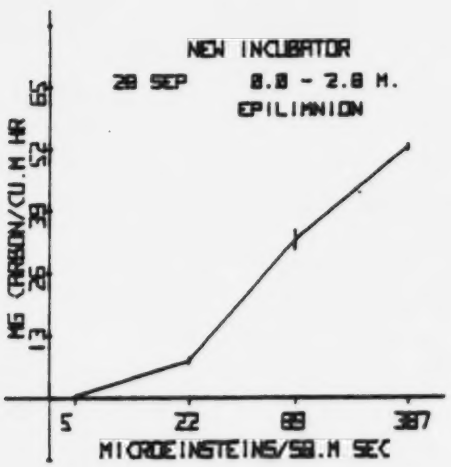

NEW INCUBATOR
23 AUG 0.0 - 1.3 M.
EPILIMNION
MG CARBON/CU.M HR
57 114 170 227 284
20 79 264 929
MICROEINSTEINS/SQ.M SEC

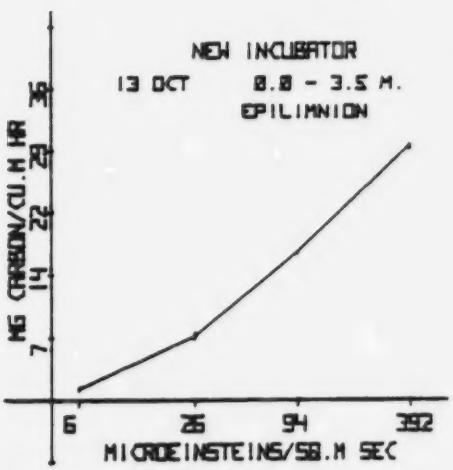

NEW INCUBATOR
6 SEP 0.0 - 1.5 M.
EPILIMNION
MG CARBON/CU.M HR
31 61 92 122 153
15 60 200 855
MICROEINSTEINS/SQ.M SEC

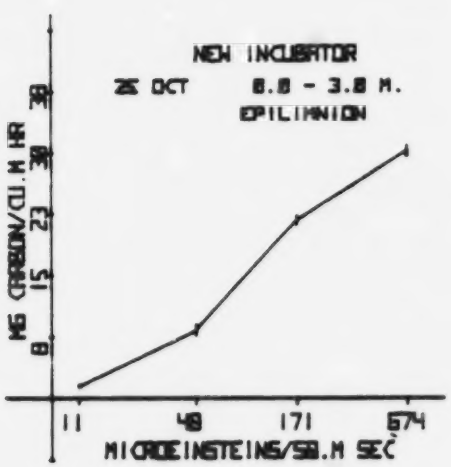
LAKE 227


NEW INCUBATOR
16 SEP 0.0 - .3 M.
EPILIMNION
MG CARBON/CU.M HR
34 69 103 138 172
13 47 168 637
MICROEINSTEINS/SQ.M SEC

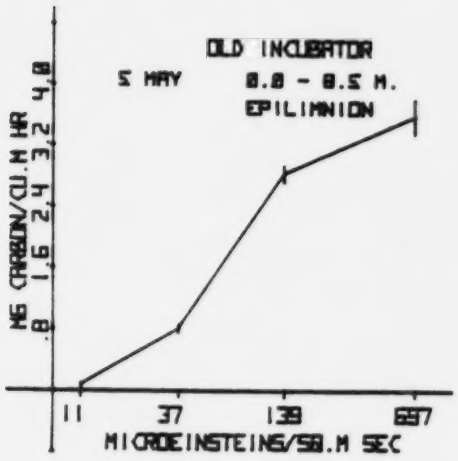

NEW INCUBATOR
28 SEP 0.0 - 1.8 M.
EPILIMNION
MR
MG CARBON/CU.M HR
20 40 60 80 100
11 42 153 603
MICROEINSTEINS/SQ.M SEC

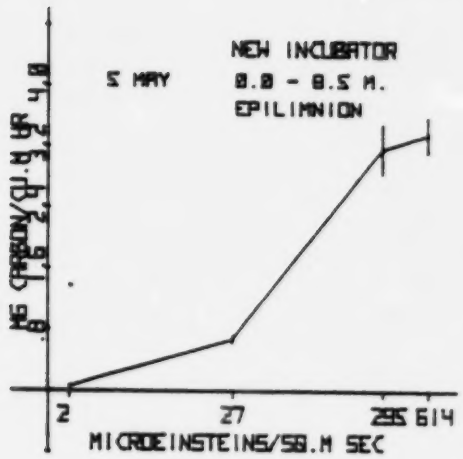

NEW INCUBATOR
28 SEP 0.0 - 2.8 M.
EPILIMNION
MG CARBON/CU.M HR
13 26 39 52 65
5 22 88 387
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
13 OCT 0.0 - 3.5 M.
EPILIMNION
MG CARBON/CU.M HR
7 14 22 29 36
6 26 94 392
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
26 OCT 0.0 - 3.0 M.
EPILIMNION
MG CARBON/CU.M HR
8 15 23 30 38
11 48 171 674
MICROEINSTEINS/SQ.M SEC

LAKE 239


OLD INCUBATOR
5 MAY 0.0 - 0.5 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
11 37 139 697
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
2 27 295 614
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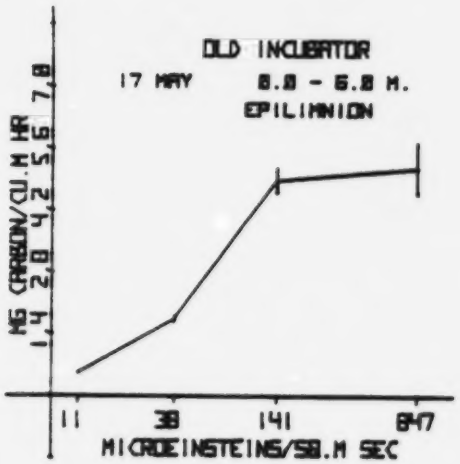
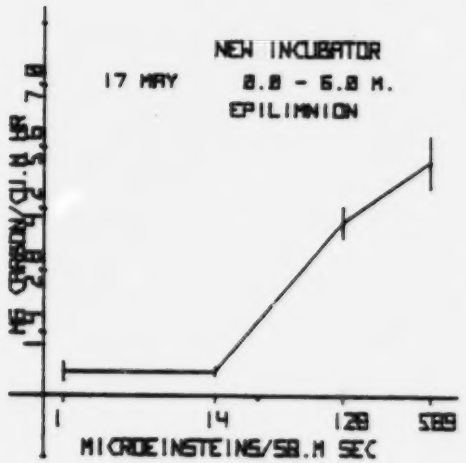

OLD INCUBATOR
17 MAY 0.0 - 6.0 M.
EPILIMNION
MG CARBON/CU.M HR
1.4 2.8 4.2 5.6 7.0
11 38 141 847
MICROEINSTEINS/SQ.M SEC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17 MAY 0.0 - 6.0 M.
EPILIMNION
MG CARBON/CU.M HR
1 14 128 589
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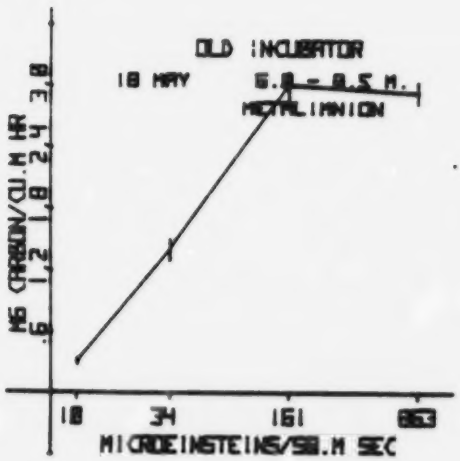
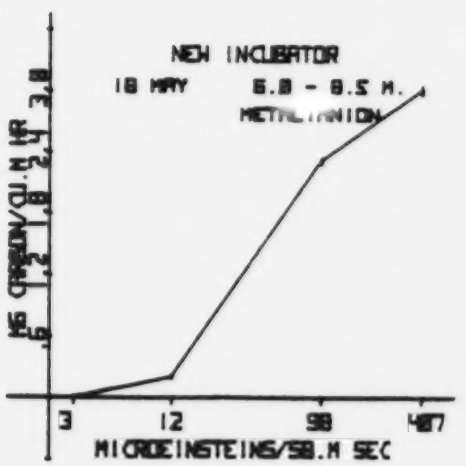
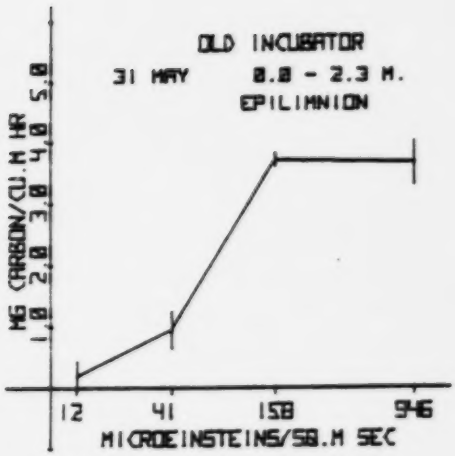
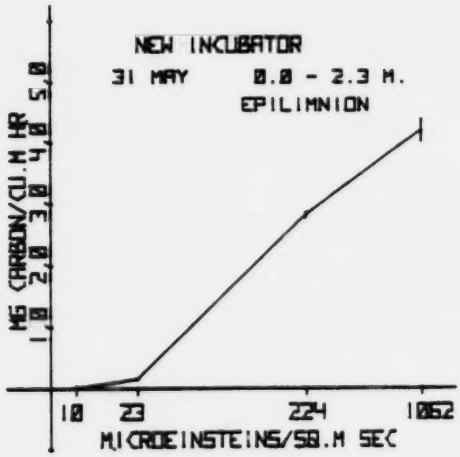

OLD INCUBATOR
18 MAY 6.0 - 8.5 M.
METALIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
18 34 161 863
MICROEINSTEINS/SQ.M SEC

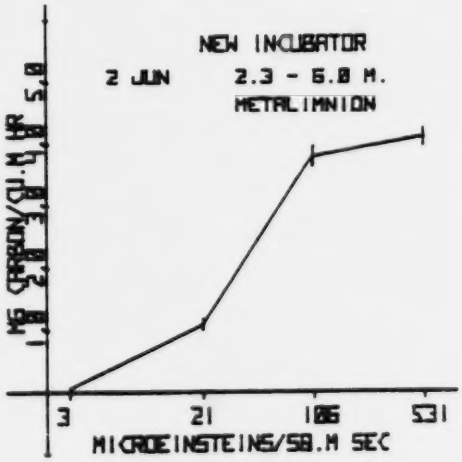

NEW INCUBATOR
18 MAY 6.0 - 8.5 M.
METALIMNION
MG CARBON/CU.M HR
3 12 98 487
MICROEINSTEINS/SQ.M SEC

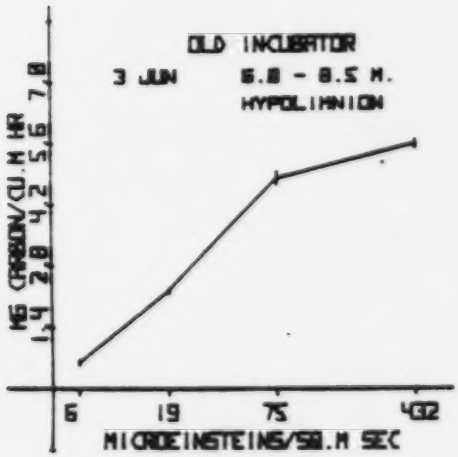
LAKE 239

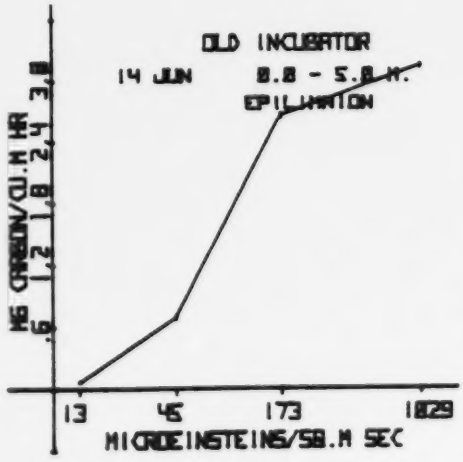

OLD INCUBATOR
31 MAY 0.0 - 2.3 M.
EPILIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
12 41 158 546
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
31 MAY 0.0 - 2.3 M.
EPILIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
10 23 224 1052
MICROEINSTEINS/SQ.M SEC

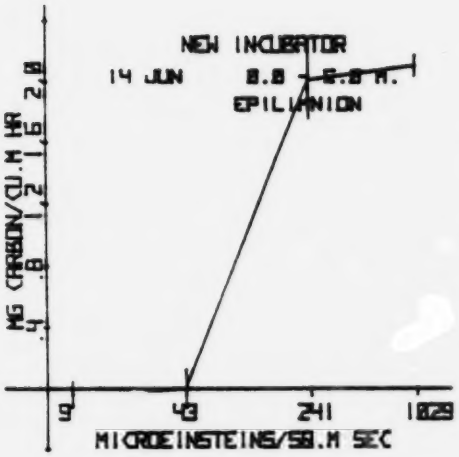
OLD INCUBATOR
2 JUN 2.3 - 6.0 M.
METALIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
8 27 185 581
MICROEINSTEINS/SQ.M SEC

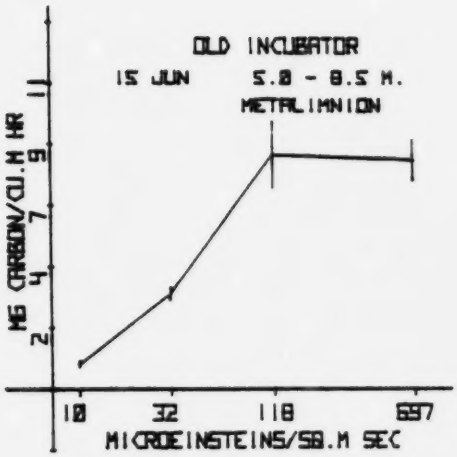

NEW INCUBATOR
2 JUN 2.3 - 6.0 M.
METALIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
3 21 185 531
MICROEINSTEINS/SQ.M SEC

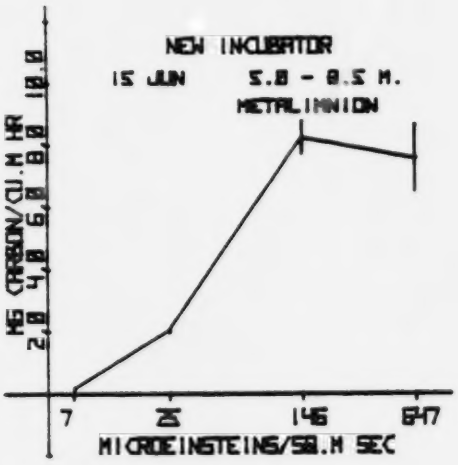

OLD INCUBATOR
3 JUN 6.0 - 8.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
1.4 2.8 4.2 5.6 7.0
6 19 75 432
MICROEINSTEINS/SQ.M SEC

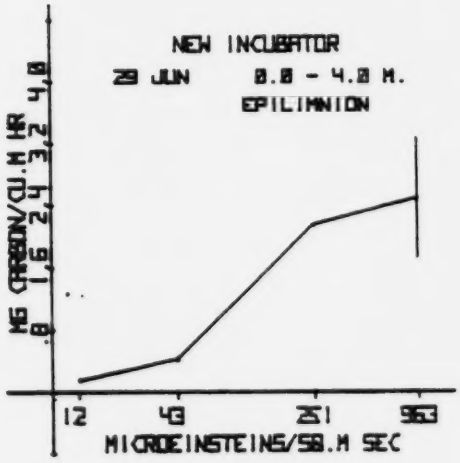

OLD INCUBATOR
14 JUN 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
13 45 173 1029
MICROEINSTEINS/SQ.M SEC

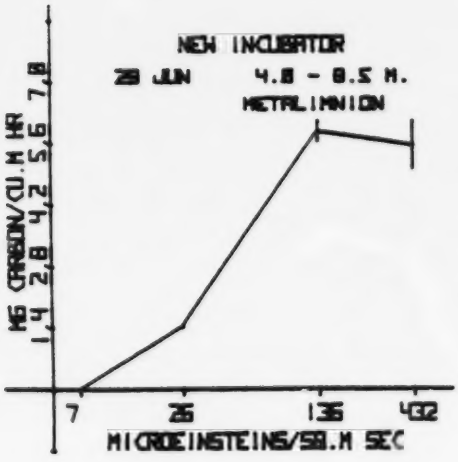
LAKE 239

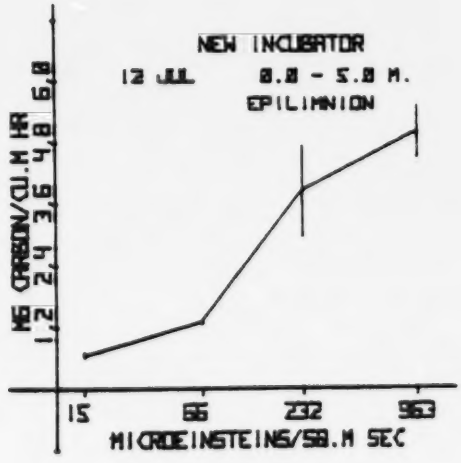

NEW INCUBATOR
14 JUN 0.0 - 0.0 M.
EPILIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.0
9 43 241 1029
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
15 JUN 5.0 - 8.5 M.
METALIMNION
MG CARBON/CU.M HR
2 4 7 9 11
10 32 118 697
MICROEINSTEINS/SQ.M SEC

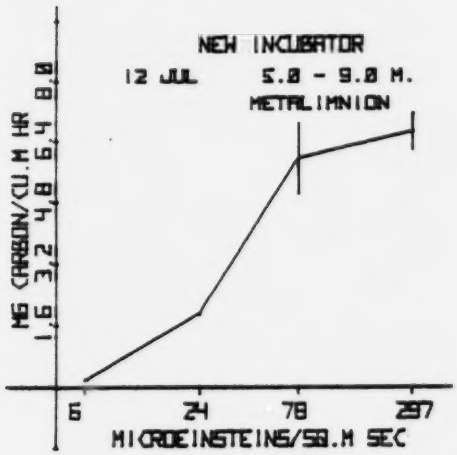

NEW INCUBATOR
15 JUN 5.0 - 8.5 M.
METALIMNION
MG CARBON/CU.M HR
2.0 4.0 6.0 8.0 10.0
7 25 146 647
MICROEINSTEINS/SQ.M SEC

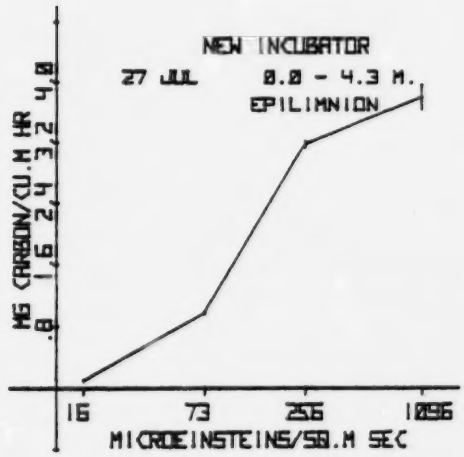

NEW INCUBATOR
29 JUN 0.0 - 4.0 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
12 43 251 963
MICROEINSTEINS/SQ.M SEC

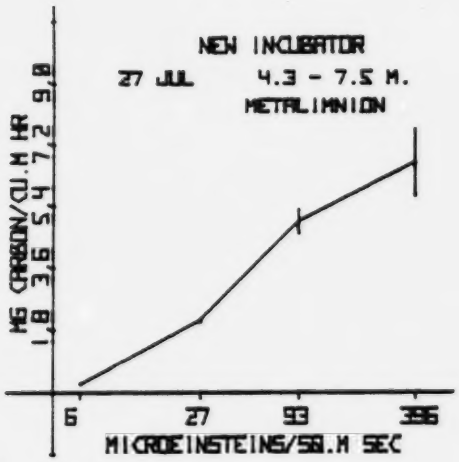

NEW INCUBATOR
29 JUN 4.0 - 8.5 M.
METALIMNION
MG CARBON/CU.M HR
1.4 2.8 4.2 5.6 7.0
7 26 135 432
MICROEINSTEINS/SQ.M SEC

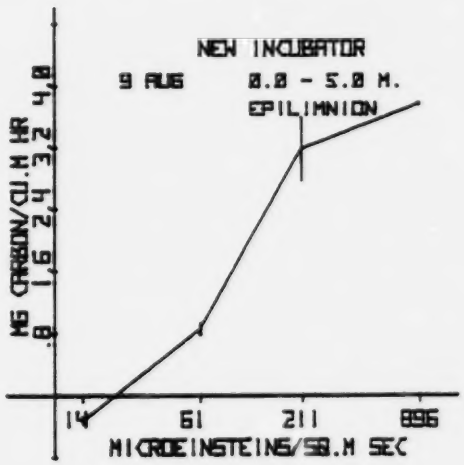

NEW INCUBATOR
12 JUL 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
15 66 232 963
MICROEINSTEINS/SQ.M SEC

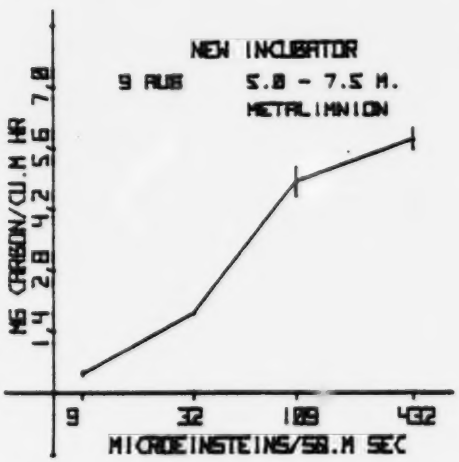
LAKE 239


NEW INCUBATOR
12 JUL 5.0 - 9.0 M.
METALIMNION
MG CARBON/CU.M HR
1.6 3.2 4.8 6.4 8.0
6 24 78 297
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
27 JUL 0.0 - 4.3 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
16 73 256 1096
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
27 JUL 4.3 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
1.8 3.6 5.4 7.2 9.0
6 27 93 396
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
9 AUG 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
14 61 211 896
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
9 AUG 5.0 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
1.4 2.8 4.2 5.6 7.0
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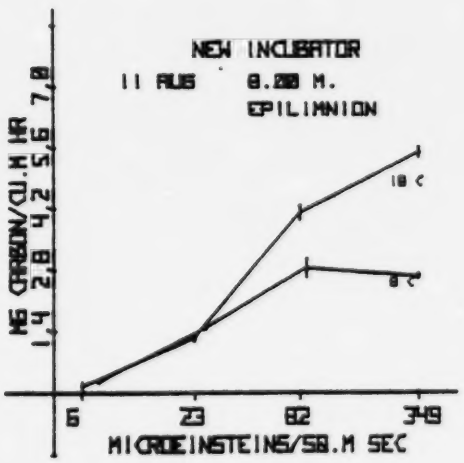
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
11 AUG 0.0 M.
EPILIMNION
18 C
8 C
MG CARBON/CU.M HR
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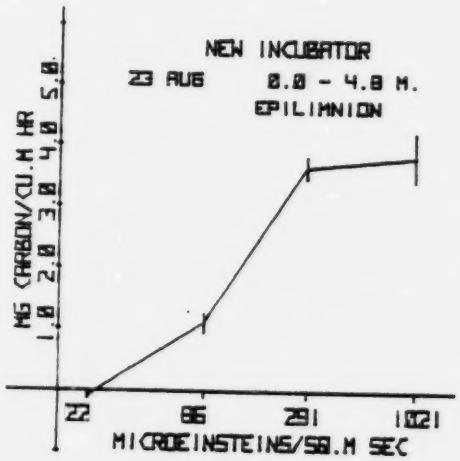
MICROEINSTEINS/SQ.M SEC

LAKE 239


NEW INCUBATOR
23 AUG 0.0 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
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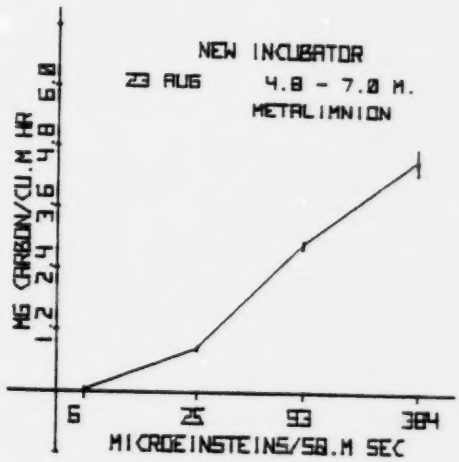
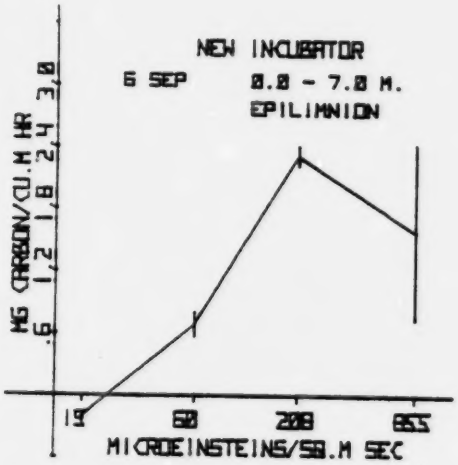
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
23 AUG 4.8 - 7.0 M.
METALIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
6 25 93 384
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
6 SEP 0.0 - 7.0 M.
EPILIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
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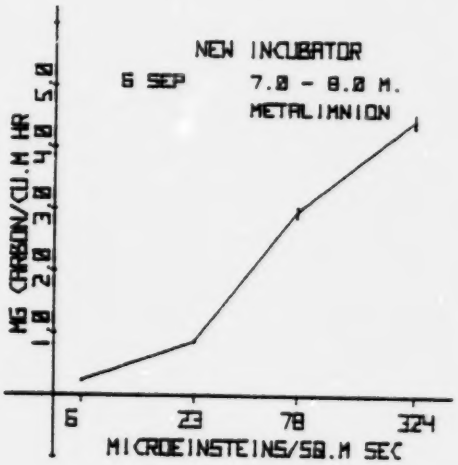
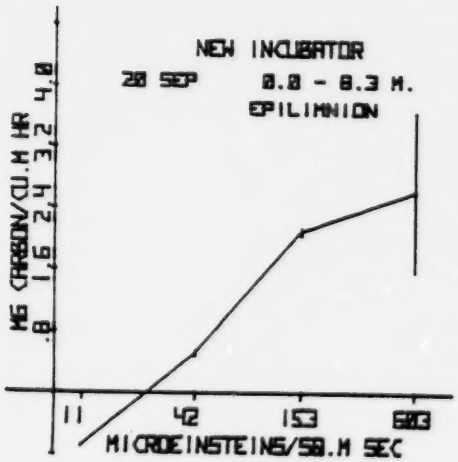
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
6 SEP 7.0 - 8.0 M.
METALIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
6 23 78 324
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
28 SEP 0.0 - 8.3 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
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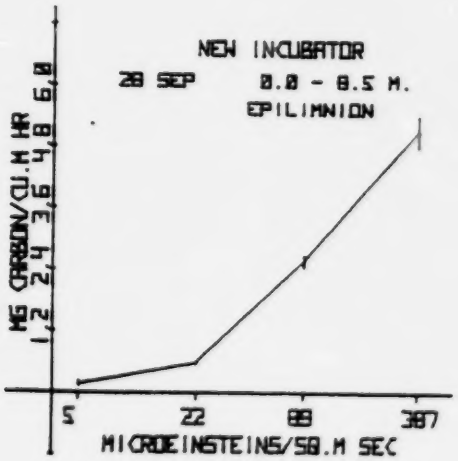
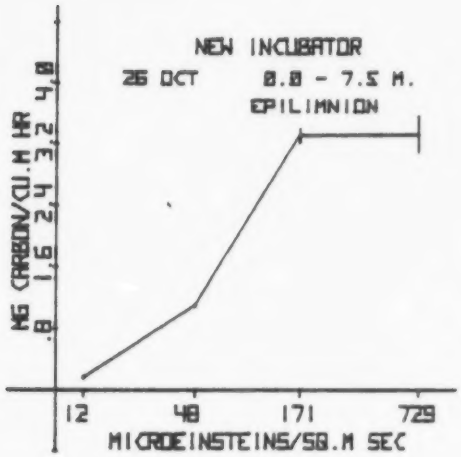
MICROEINSTEINS/SQ.M SEC

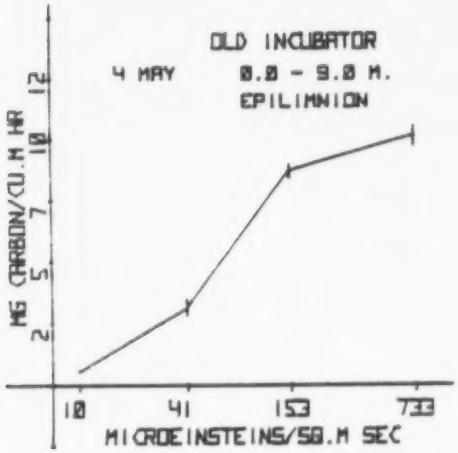

NEW INCUBATOR
28 SEP 0.0 - 8.5 M.
EPILIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
5 22 89 387
MICROEINSTEINS/SQ.M SEC

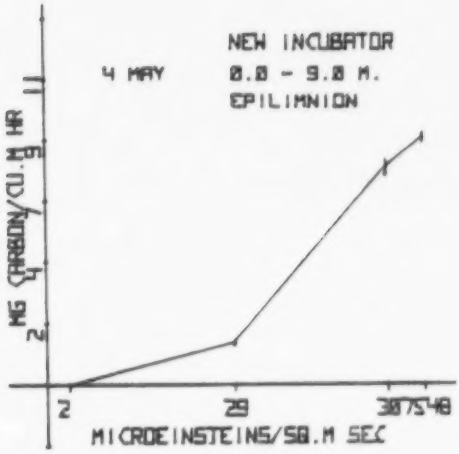
LAKE 239

NEW INCUBATOR
11 OCT 0.0 - 8.0 M.
EPILIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
8 29 105 420
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
26 OCT 0.0 - 7.5 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
12 48 171 729
MICROEINSTEINS/SQ.M SEC

LAKE 302 N


OLD INCUBATOR
4 MAY 0.0 - 9.0 M.
EPILIMNION
MG CARBON/CU.M HR
2 5 7 10 12
10 41 153 733
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
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EPILIMNION
MG CARBON/CU.M HR
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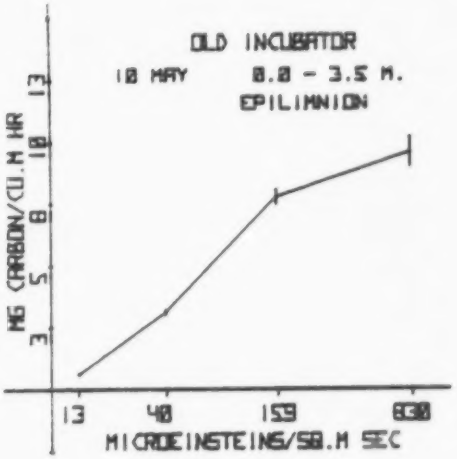
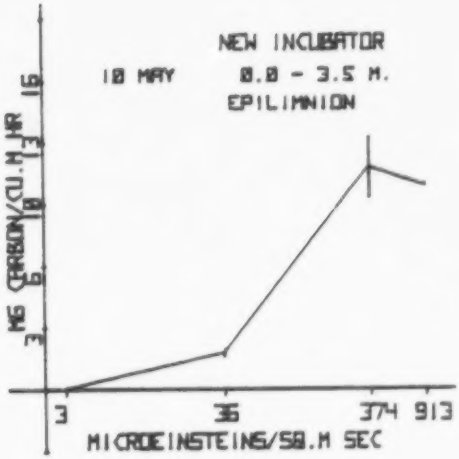
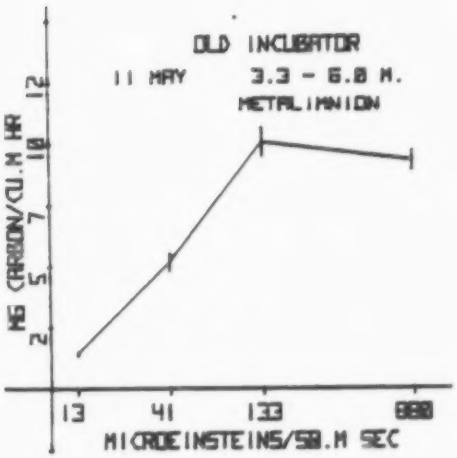
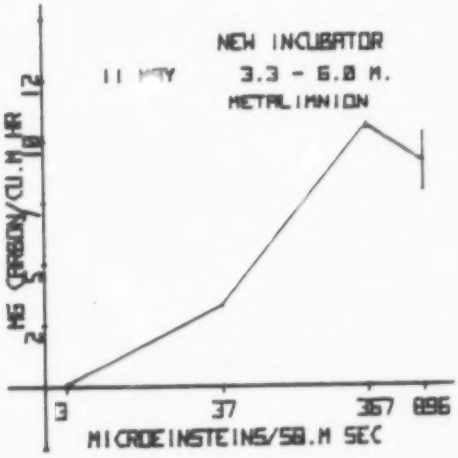
2 29 387548
MICROEINSTEINS/SQ.M SEC

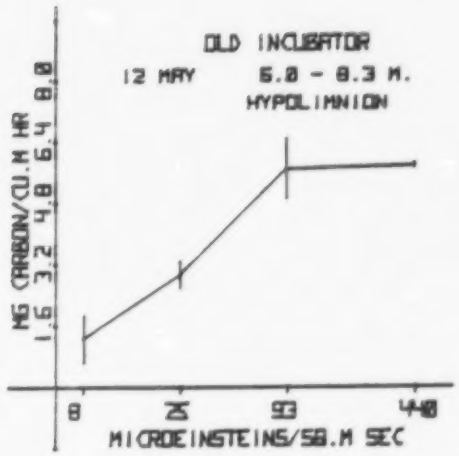

OLD INCUBATOR
10 MAY 0.0 - 3.5 M.
EPILIMNION
MG CARBON/CU.M HR
3 5 8 10 13
13 48 159 830
MICROEINSTEINS/SQ.M SEC

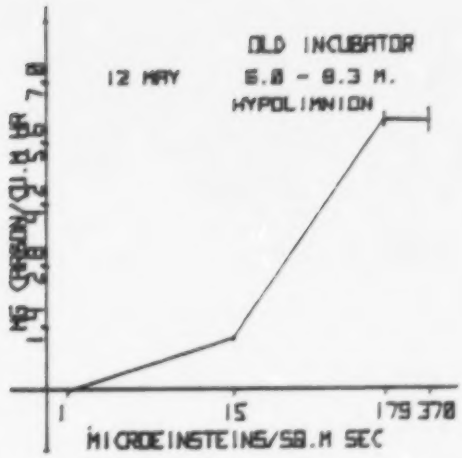

NEW INCUBATOR
10 MAY 0.0 - 3.5 M.
EPILIMNION
MG CARBON/CU.M HR
3 6 10 15
3 36 374 913
MICROEINSTEINS/SQ.M SEC

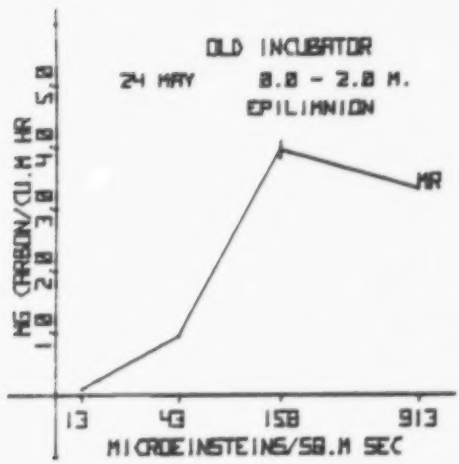

OLD INCUBATOR
11 MAY 3.3 - 6.8 M.
METALIMNION
MG CARBON/CU.M HR
2 5 7 10 12
13 41 133 888
MICROEINSTEINS/SQ.M SEC

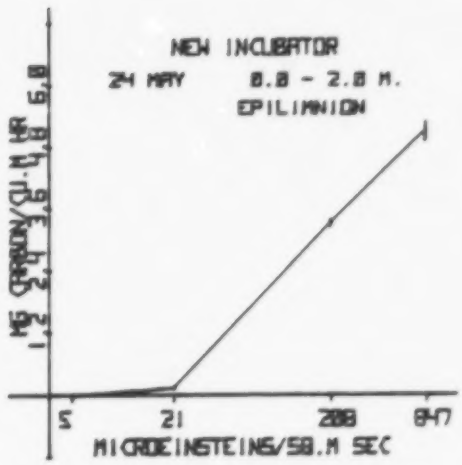

NEW INCUBATOR
11 MAY 3.3 - 6.8 M.
METALIMNION
MG CARBON/CU.M HR
2 5 8 21
3 37 367 896
MICROEINSTEINS/SQ.M SEC

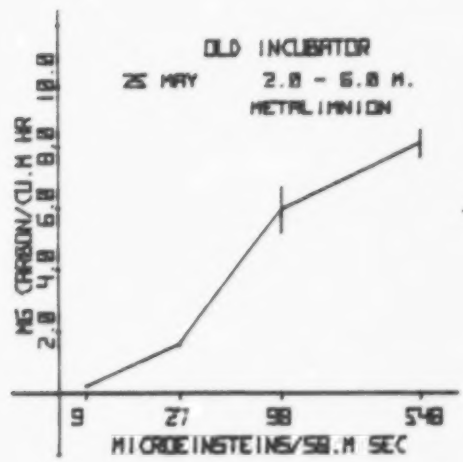
LAKE 302 N

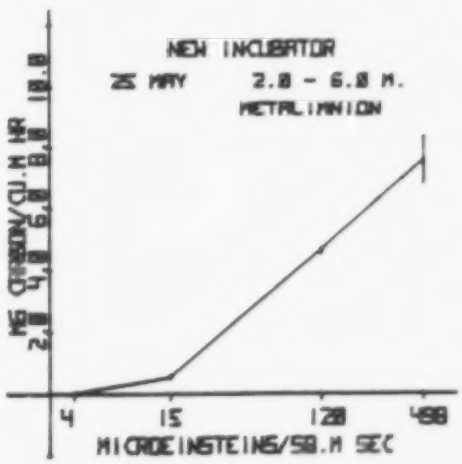

OLD INCUBATOR
12 MAY 6.0 - 8.3 M.
HYPOLIMNION
MG CARBON/CU.M HR
1.6 3.2 4.8 6.4 8.0
8 25 93 448
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
12 MAY 6.8 - 8.3 M.
HYPOLIMNION
MG CARBON/CU.M HR
1 15 179 370
MICROEINSTEINS/SQ.M SEC

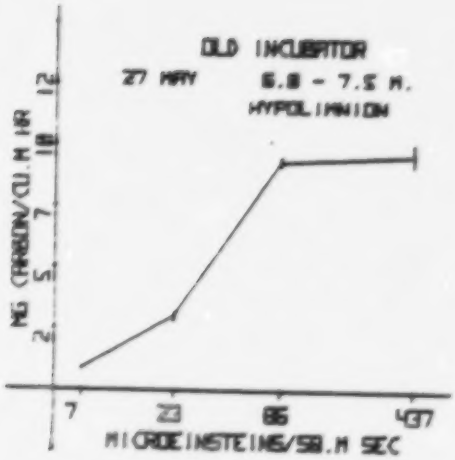

OLD INCUBATOR
24 MAY 8.8 - 2.8 M.
EPILIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
MR
13 43 158 913
MICROEINSTEINS/SQ.M SEC

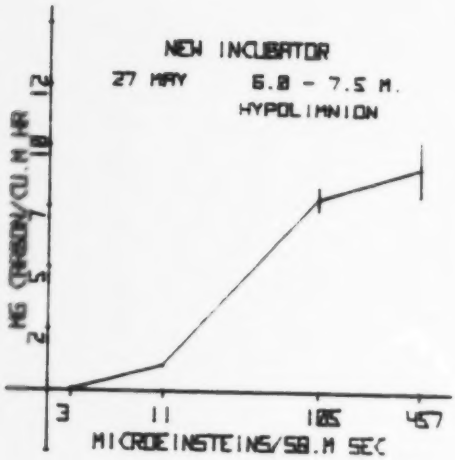

NEW INCUBATOR
24 MAY 8.8 - 2.8 M.
EPILIMNION
MG CARBON/CU.M HR
5 21 288 847
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
25 MAY 2.8 - 6.8 M.
METALIMNION
MG CARBON/CU.M HR
2.8 4.8 6.8 8.8 10.8
9 27 98 548
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
25 MAY 2.8 - 6.8 M.
METALIMNION
MG CARBON/CU.M HR
4 15 128 498
MICROEINSTEINS/SQ.M SEC

LAKE 302 N


OLD INCUBATOR
27 MAY 6.8 - 7.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
7
23
85
437


NEW INCUBATOR
27 MAY 6.8 - 7.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
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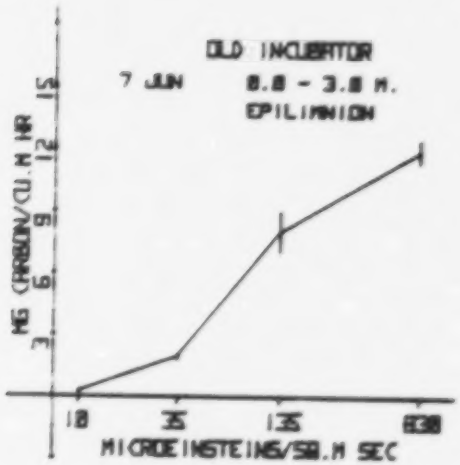
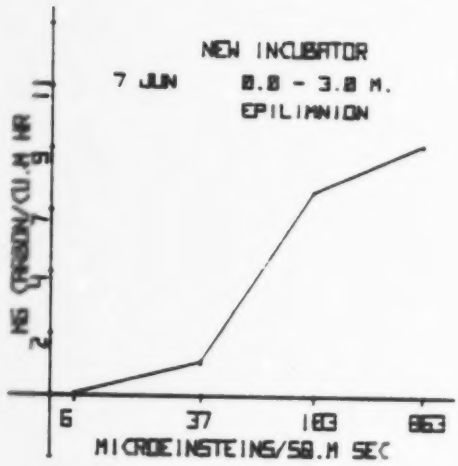
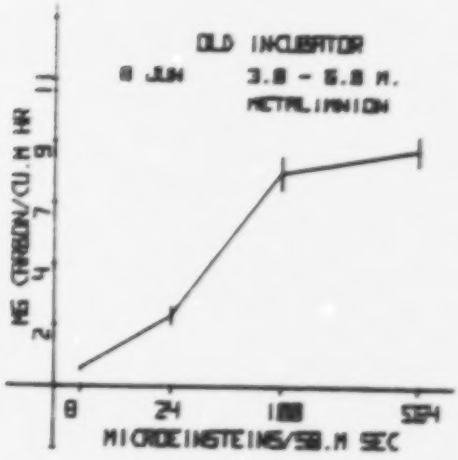
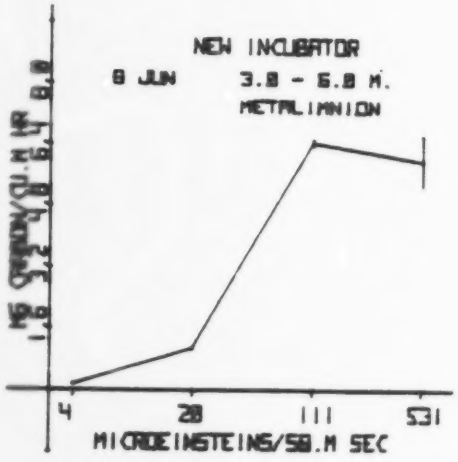
11
185
457

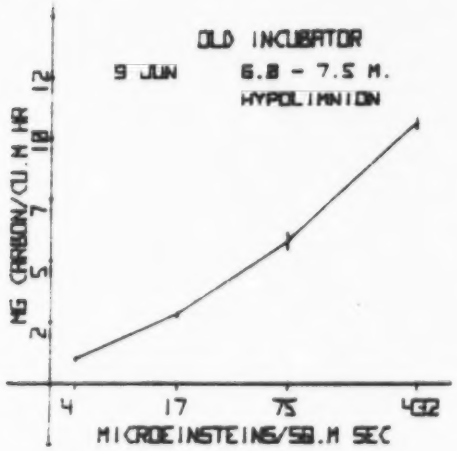

OLD INCUBATOR
7 JUN 0.8 - 3.8 M.
EPILIMNION
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
18
35
135
838

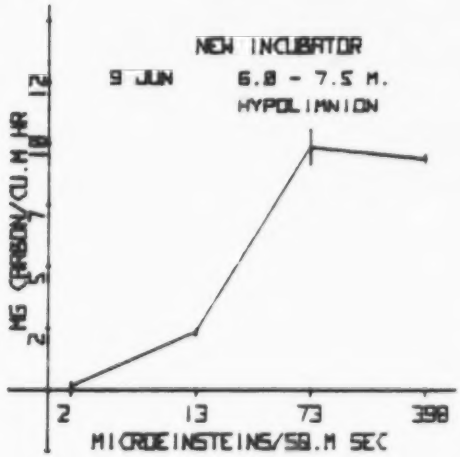

NEW INCUBATOR
7 JUN 0.8 - 3.8 M.
EPILIMNION
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
6
37
183
863

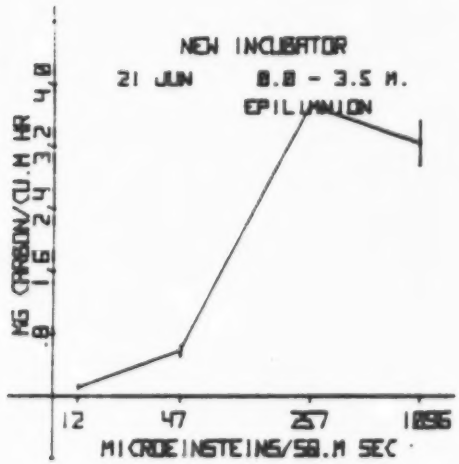

OLD INCUBATOR
8 JUN 3.8 - 6.8 M.
METALIMNION
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
8
24
108
524

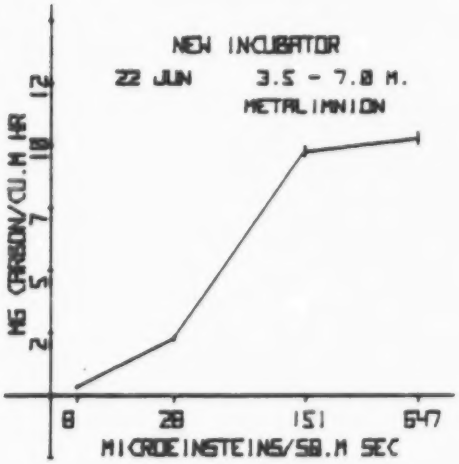

NEW INCUBATOR
8 JUN 3.8 - 6.8 M.
METALIMNION
MG CARBON/CU.M HR
MICROEINSTEINS/SQ.M SEC
4
28
111
531

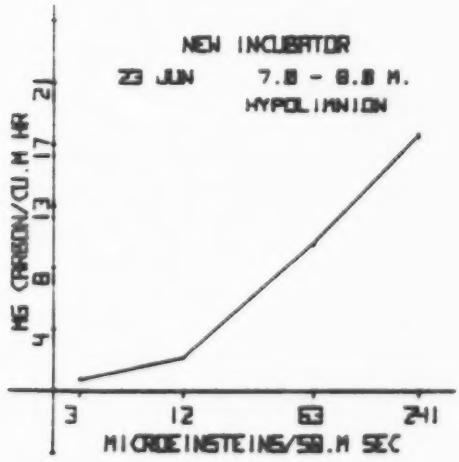
LAKE 302 N

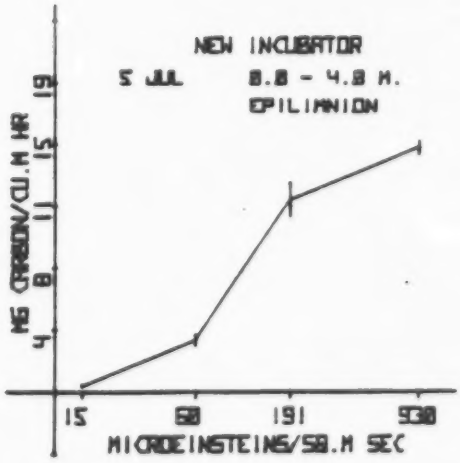

OLD INCUBATOR
9 JUN 6.8 - 7.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
2
5
7
10
12
4
17
75
432
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
9 JUN 6.8 - 7.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
2
3
7
10
12
2
13
73
398
MICROEINSTEINS/SQ.M SEC

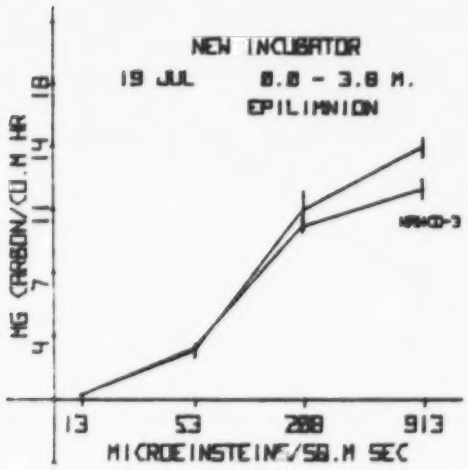

NEW INCUBATOR
21 JUN 8.8 - 3.5 M.
EPILIMNION
MG CARBON/CU.M HR
.8
1,6
2,4
3,2
4,8
12
47
257
1896
MICROEINSTEINS/SQ.M SEC

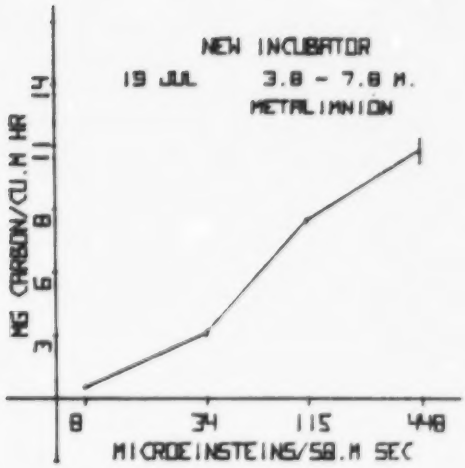

NEW INCUBATOR
22 JUN 3.5 - 7.8 M.
METALIMNION
MG CARBON/CU.M HR
2
5
7
10
12
8
28
151
647
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
23 JUN 7.8 - 8.8 M.
HYPOLIMNION
MG CARBON/CU.M HR
4
8
13
17
21
3
12
63
241
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
5 JUL 8.8 - 4.8 M.
EPILIMNION
MG CARBON/CU.M HR
4
8
11
15
19
15
58
191
938
MICROEINSTEINS/SQ.M SEC

LAKE 302 N


NEW INCUBATOR
19 JUL 0.0 - 3.0 M.
EPILIMNION
MG CARBON/CU.M HR
4 7 11 14 18
13 53 208 913
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
19 JUL 3.0 - 7.0 M.
METALIMNION
MG CARBON/CU.M HR
3 6 8 11 14
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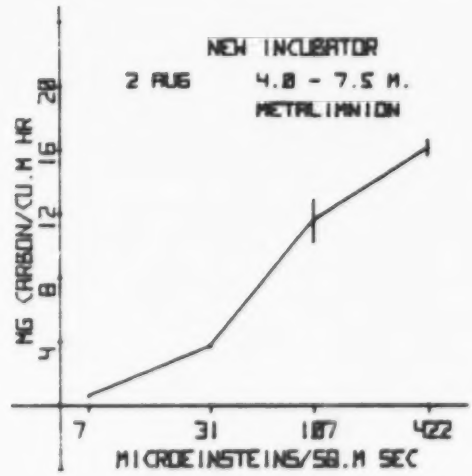
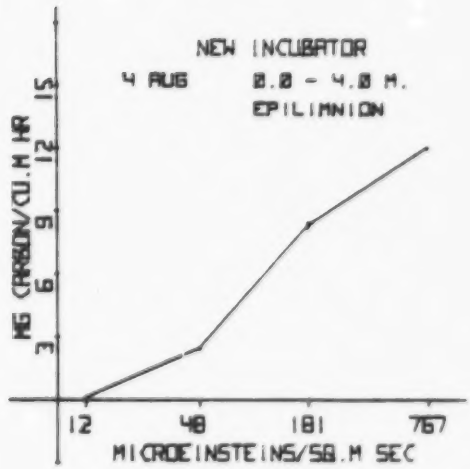
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
2 AUG 4.0 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
4 8 12 16 20
7 31 187 422
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
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EPILIMNION
MG CARBON/CU.M HR
3 6 9 12 15
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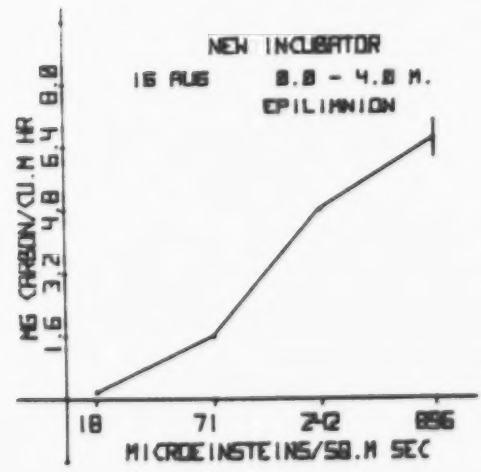
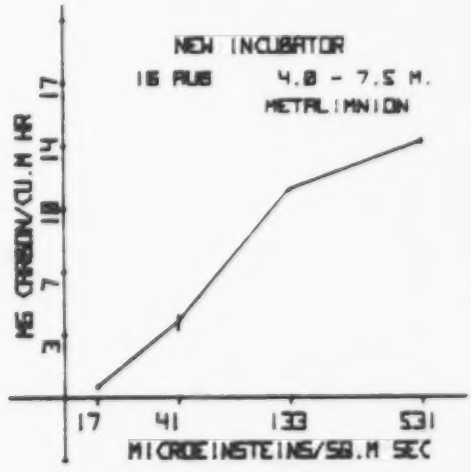
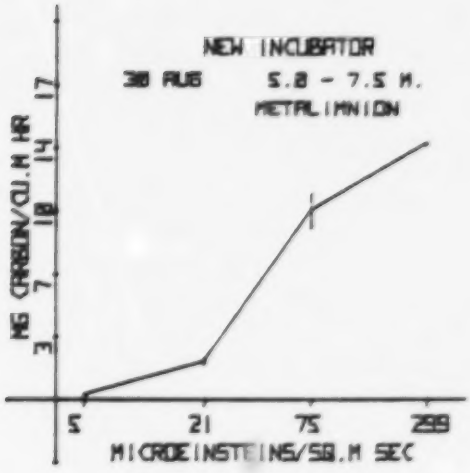
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
16 AUG 0.0 - 4.0 M.
EPILIMNION
MG CARBON/CU.M HR
1.6 3.2 4.8 6.4 8.0
18 71 242 856
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
16 AUG 4.0 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
3 7 10 14 17
17 41 133 531
MICROEINSTEINS/SQ.M SEC

LAKE 302 N

NEW INCUBATOR
30 AUG 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
11 46 168 787
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
30 AUG 5.0 - 7.5 M.
METALIMNION
MG CARBON/CU.M HR
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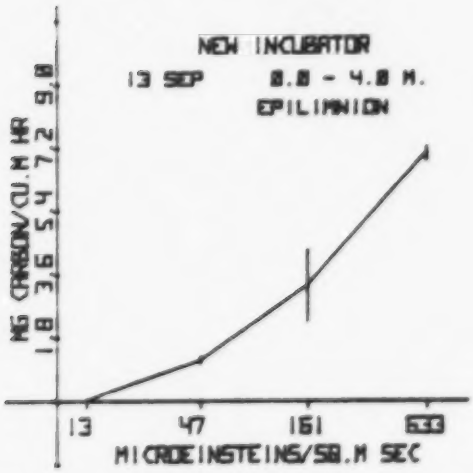
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
13 SEP 0.0 - 4.0 M.
EPILIMNION
MG CARBON/CU.M HR
1.8 3.6 5.4 7.2 9.0
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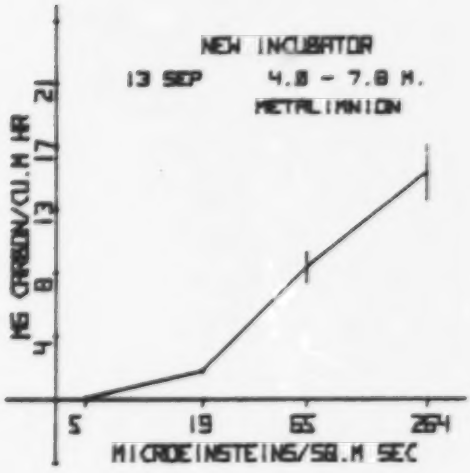
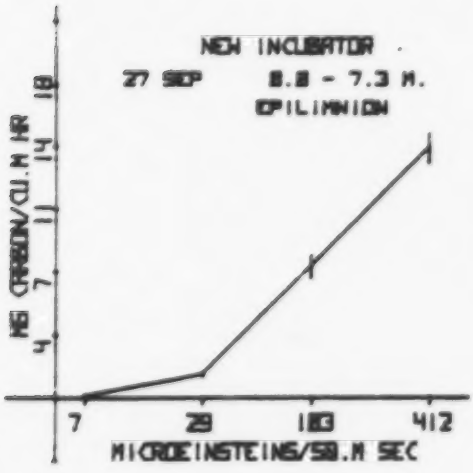
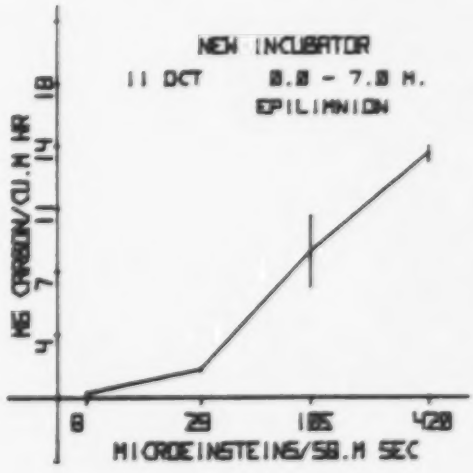
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
13 SEP 4.0 - 7.0 M.
METALIMNION
MG CARBON/CU.M HR
4 8 13 17 21
5 19 65 264
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
27 SEP 0.0 - 7.3 M.
EPILIMNION
MG CARBON/CU.M HR
4 7 11 14 18
7 29 103 412
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
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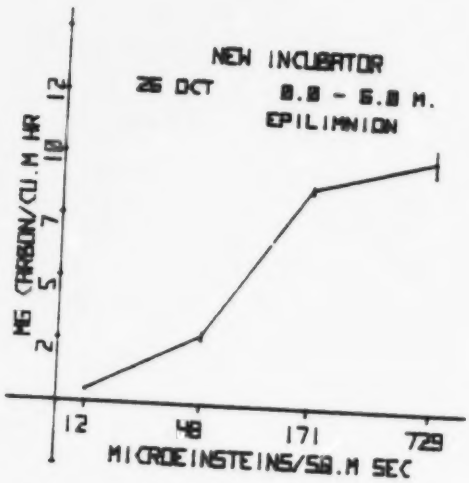
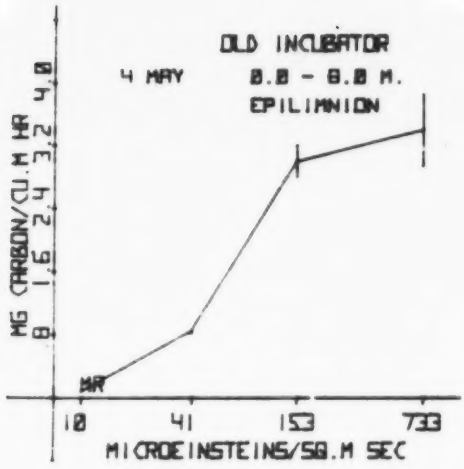
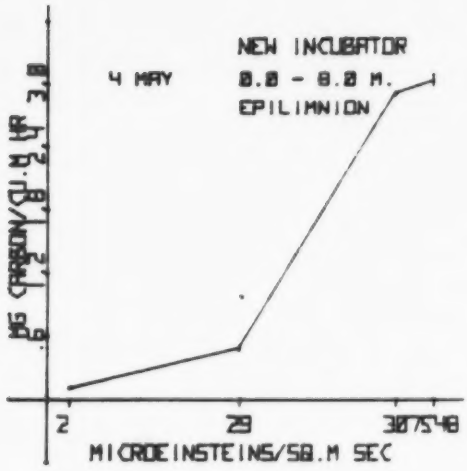
EPILIMNION
MG CARBON/CU.M HR
4 7 11 14 18
8 29 105 420
MICROEINSTEINS/SQ.M SEC

LAKE 302 N


NEW INCUBATOR
26 OCT
8.8 - 6.8 M.
EPILIMNION
MG CARBON/CU.M HR
2
5
7
10
12
12
48
171
729
MICROEINSTEINS/SQ.M SEC

LAKE 302 S


OLD INCUBATOR
4 MAY 0.0 - 6.0 M.
EPILIMNION
MG CARBON/CU.M HR
0 1.6 2.4 3.2 4.0
MAR
10 41 153 733
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
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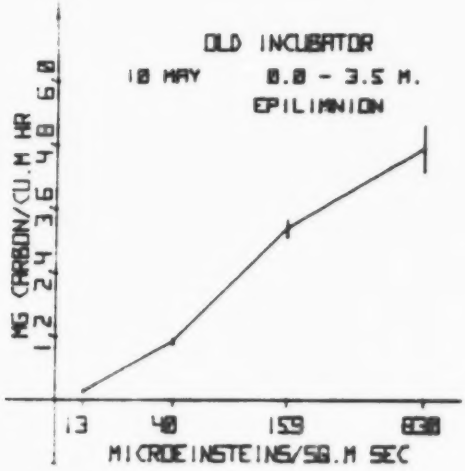
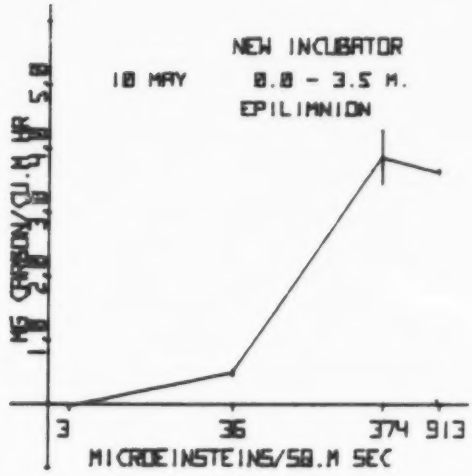
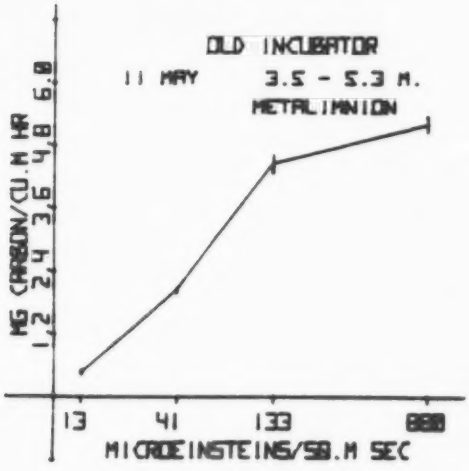
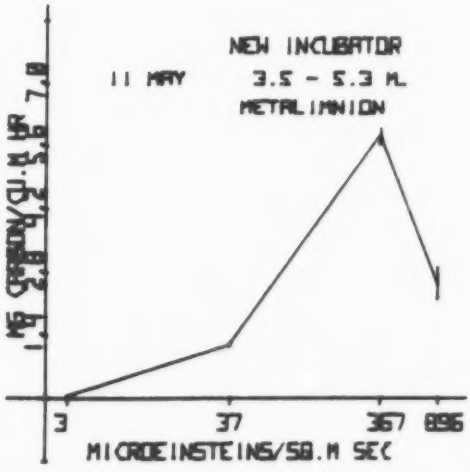
MICROEINSTEINS/SQ.M SEC

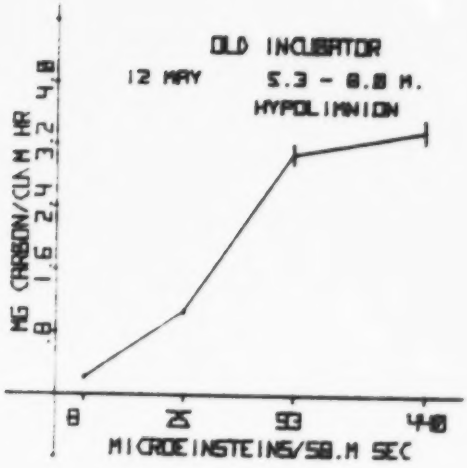

OLD INCUBATOR
10 MAY 0.0 - 3.5 M.
EPILIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
13 40 159 838
MICROEINSTEINS/SQ.M SEC

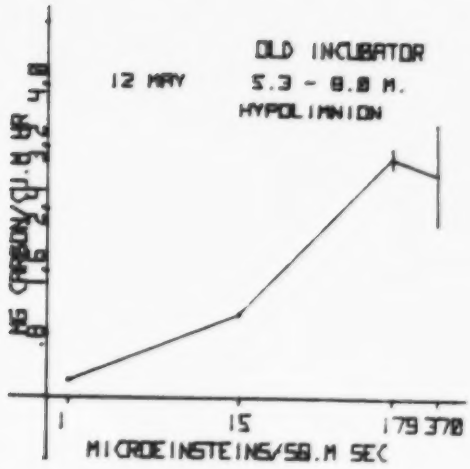

NEW INCUBATOR
10 MAY 0.0 - 3.5 M.
EPILIMNION
MG CARBON/CU.M HR
3 36 374 913
MICROEINSTEINS/SQ.M SEC

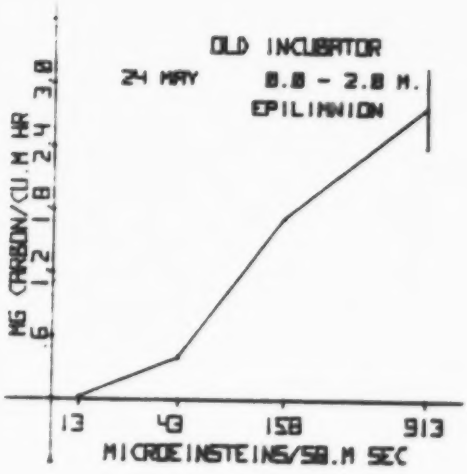

OLD INCUBATOR
11 MAY 3.5 - 5.3 M.
METALIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
13 41 133 888
MICROEINSTEINS/SQ.M SEC

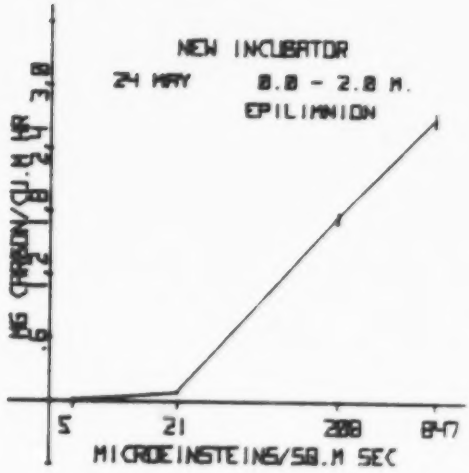

NEW INCUBATOR
11 MAY 3.5 - 5.3 M.
METALIMNION
MG CARBON/CU.M HR
3 37 367 896
MICROEINSTEINS/SQ.M SEC

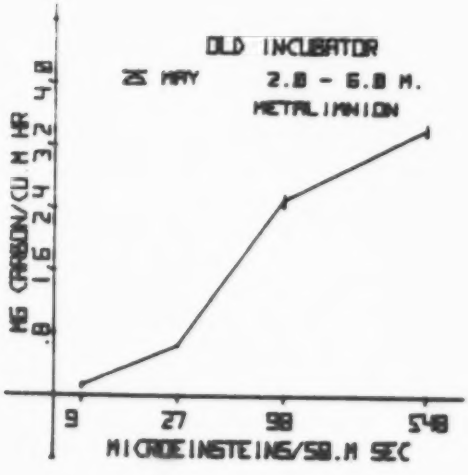
LAKE 302 S

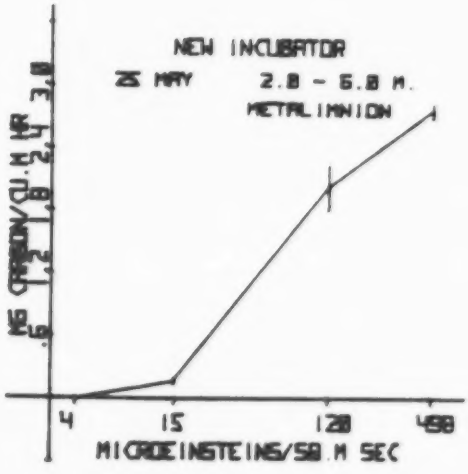

OLD INCUBATOR
12 MAY 5.3 - 8.8 M.
HYPOLIMNION
MG CARBON/CU M HR
.8 1.6 2.4 3.2 4.8
8 25 93 440
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
12 MAY 5.3 - 8.8 M.
HYPOLIMNION
MG CARBON/CU M HR
.8 1.6 2.4 3.2 4.8
1 15 179 370
MICROEINSTEINS/SQ.M SEC

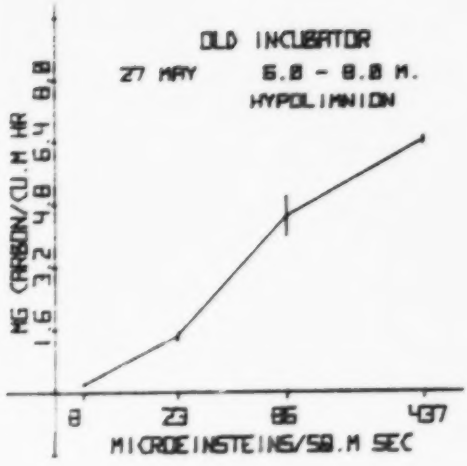

OLD INCUBATOR
24 MAY 8.8 - 2.8 M.
EPILIMNION
MG CARBON/CU M HR
.6 1.2 1.8 2.4 3.0
13 49 158 913
MICROEINSTEINS/SQ.M SEC

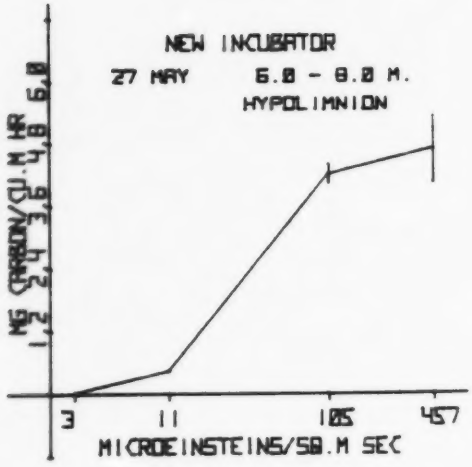

NEW INCUBATOR
24 MAY 8.8 - 2.8 M.
EPILIMNION
MG CARBON/CU M HR
.6 1.2 1.8 2.4 3.0
5 21 200 847
MICROEINSTEINS/SQ.M SEC

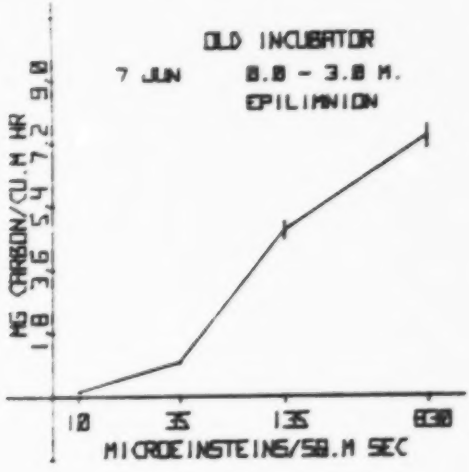

OLD INCUBATOR
25 MAY 2.8 - 6.8 M.
METALIMNION
MG CARBON/CU M HR
.8 1.6 2.4 3.2 4.8
9 27 98 548
MICROEINSTEINS/SQ.M SEC

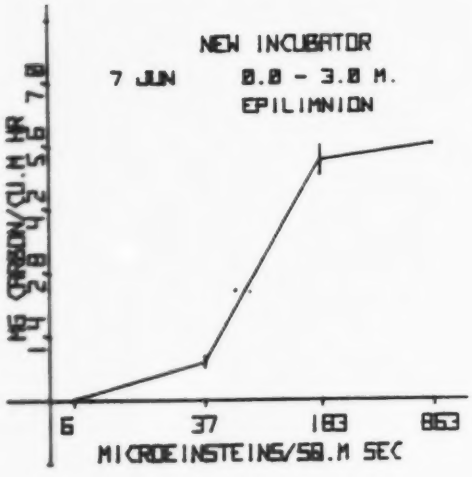

NEW INCUBATOR
25 MAY 2.8 - 6.8 M.
METALIMNION
MG CARBON/CU M HR
.6 1.2 1.8 2.4 3.0
4 15 120 498
MICROEINSTEINS/SQ.M SEC

LAKE 302 S


OLD INCUBATOR
27 MAY 6.0 - 8.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
1.6 3.2 4.8 6.4 8.0
8 23 86 437
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
27 MAY 6.0 - 8.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
3 11 105 457
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
7 JUN 0.0 - 3.0 M.
EPILIMNION
MG CARBON/CU.M HR
1.8 3.6 5.4 7.2 9.0
10 35 135 830
MICROEINSTEINS/SQ.M SEC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7 JUN 0.0 - 3.0 M.
EPILIMNION
MG CARBON/CU.M HR
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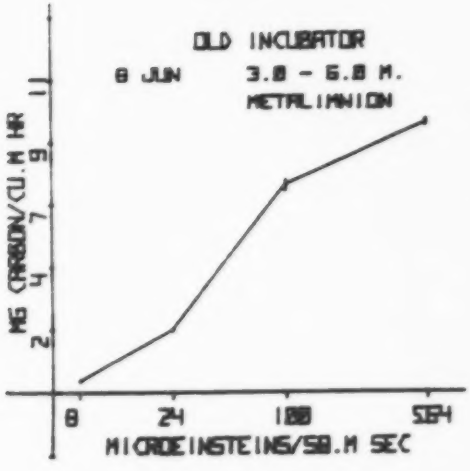
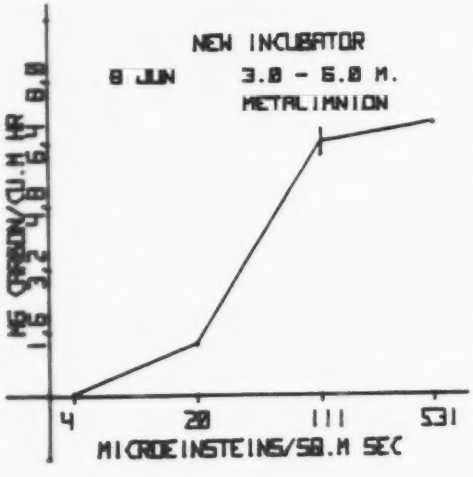
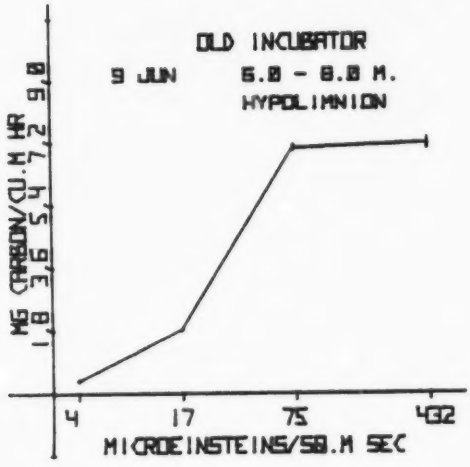
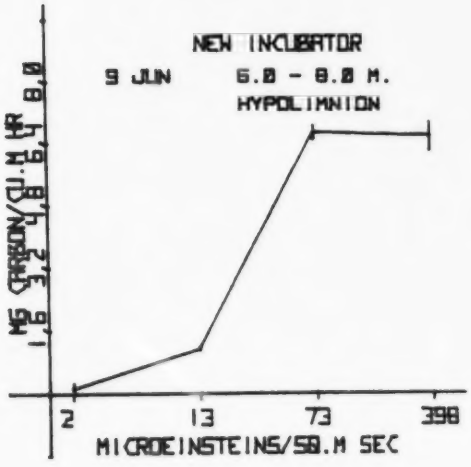
MICROEINSTEINS/SQ.M SEC

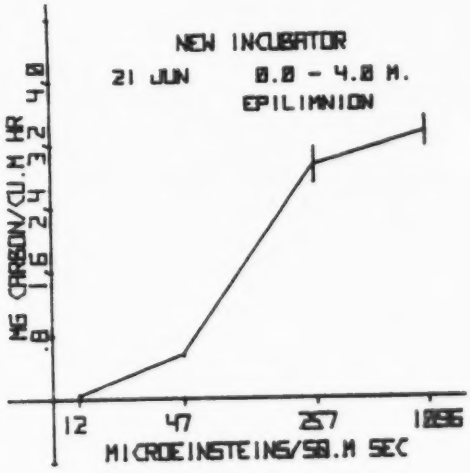

OLD INCUBATOR
8 JUN 3.0 - 6.0 M.
METALIMNION
MG CARBON/CU.M HR
2 4 7 9 11
8 24 188 514
MICROEINSTEINS/SQ.M SEC

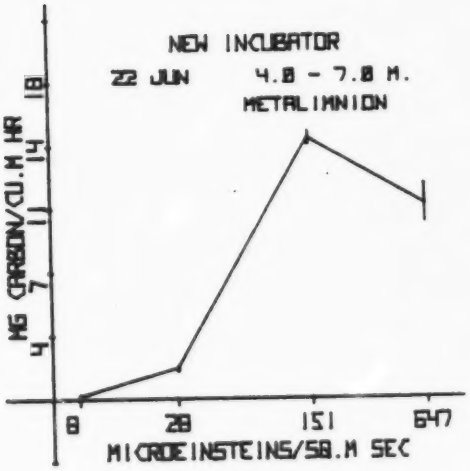

NEW INCUBATOR
8 JUN 3.0 - 6.0 M.
METALIMNION
MG CARBON/CU.M HR
1.6 3.2 4.8 6.4 8.0
4 20 111 531
MICROEINSTEINS/SQ.M SEC

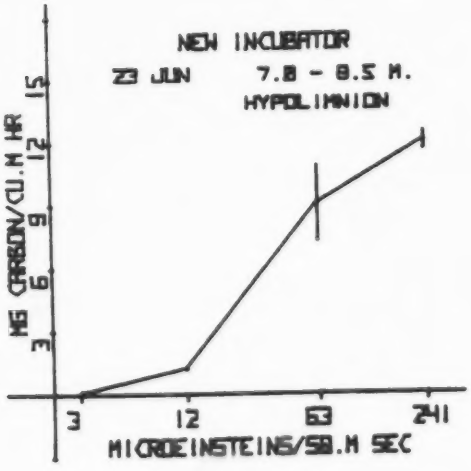
LAKE 302 S

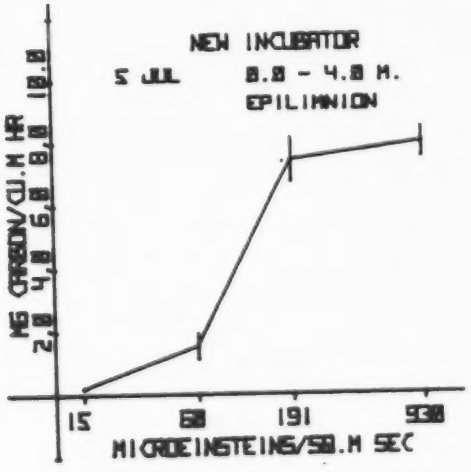

OLD INCUBATOR
9 JUN 6.0 - 8.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
1.8 3.6 5.4 7.2 9.0
4 17 75 432
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
9 JUN 6.0 - 8.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
1.6 3.2 4.8 6.4 8.0
2 13 73 398
MICROEINSTEINS/SQ.M SEC

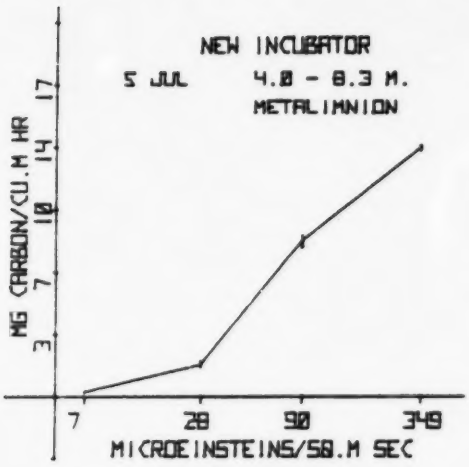

NEW INCUBATOR
21 JUN 0.0 - 4.0 M.
EPILIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
12 47 257 1896
MICROEINSTEINS/SQ.M SEC

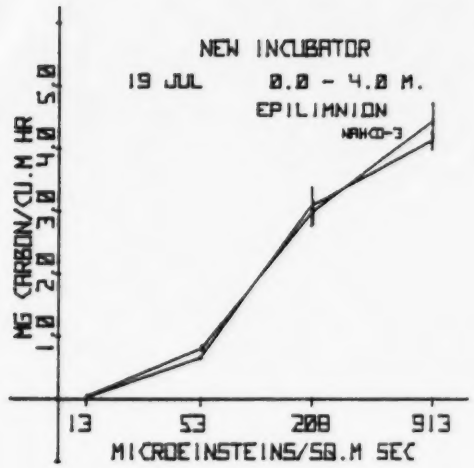

NEW INCUBATOR
22 JUN 4.0 - 7.0 M.
METALIMNION
MG CARBON/CU.M HR
4 7 11 14 18
8 28 151 647
MICROEINSTEINS/SQ.M SEC

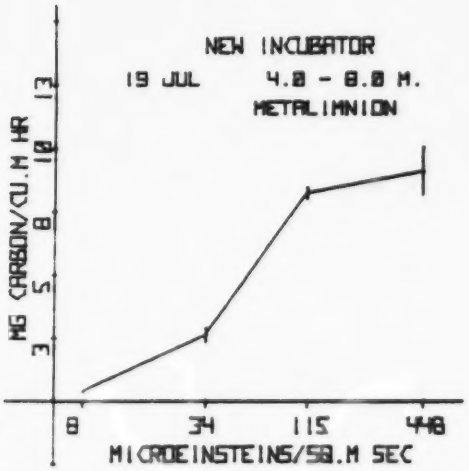

NEW INCUBATOR
23 JUN 7.0 - 8.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
3 6 9 12 15
3 12 63 241
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
5 JUL 0.0 - 4.0 M.
EPILIMNION
MG CARBON/CU.M HR
2.0 4.0 6.0 8.0 10.0
15 68 191 938
MICROEINSTEINS/SQ.M SEC

LAKE 302 S


NEW INCUBATOR
5 JUL 4.0 - 8.3 M.
METALIMNION
MG CARBON/CU.M HR
3 7 10 14 17
7 28 90 349
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
19 JUL 0.0 - 4.0 M.
EPILIMNION
NAHCO-3
MG CARBON/CU.M HR
1,0 2,0 3,0 4,0 5,0
13 53 208 913
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
19 JUL 4.0 - 8.0 M.
METALIMNION
MG CARBON/CU.M HR
3 5 8 10 13
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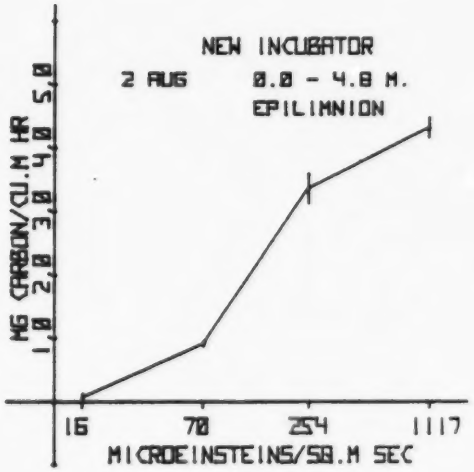
NEW INCUBATOR
2 AUG 0.0 - 4.0 M.
EPILIMNION
MG CARBON/CU.M HR
1,0 2,0 3,0 4,0 5,0
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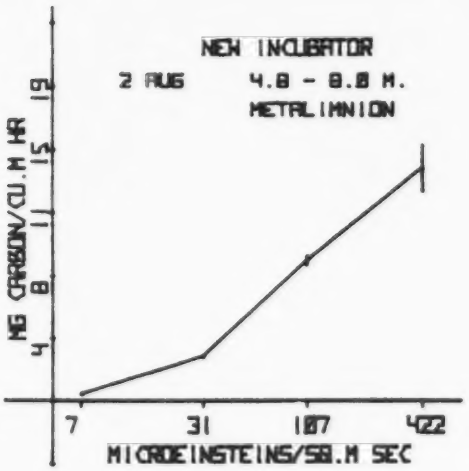
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
2 AUG 4.0 - 8.0 M.
METALIMNION
MG CARBON/CU.M HR
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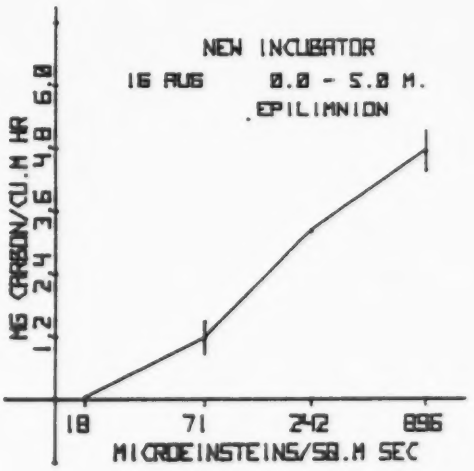
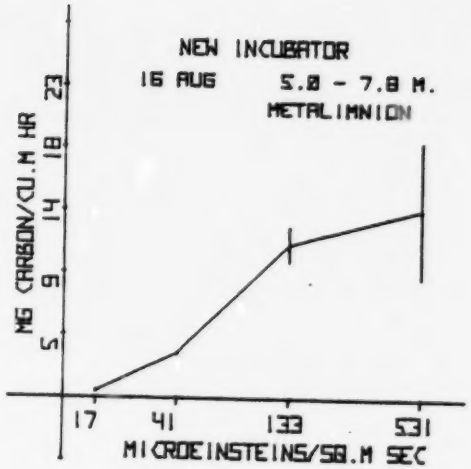
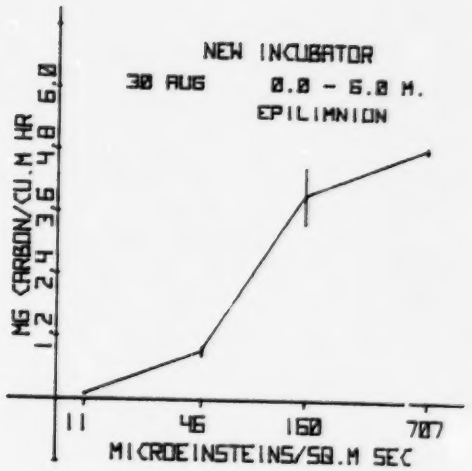

NEW INCUBATOR
16 AUG 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
1,2 2,4 3,6 4,8 6,0
18 71 242 896
MICROEINSTEINS/SQ.M SEC

LAKE 302 S


NEW INCUBATOR
16 AUG 5.0 - 7.8 M.
METALIMNION
MG CARBON/CU.M HR
5 9 14 18 23
17 41 133 531
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
30 AUG 0.0 - 6.0 M.
EPILIMNION
MG CARBON/CU.M HR
1,2 2,4 3,6 4,8 6,0
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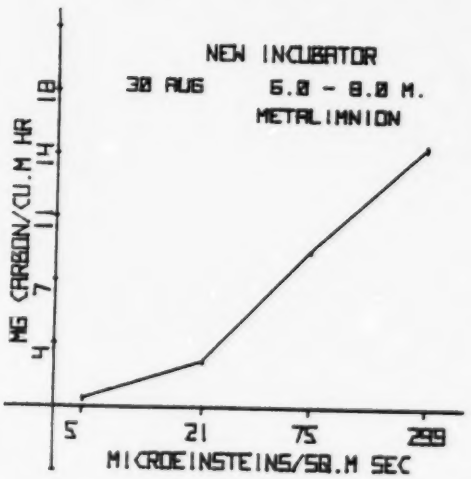
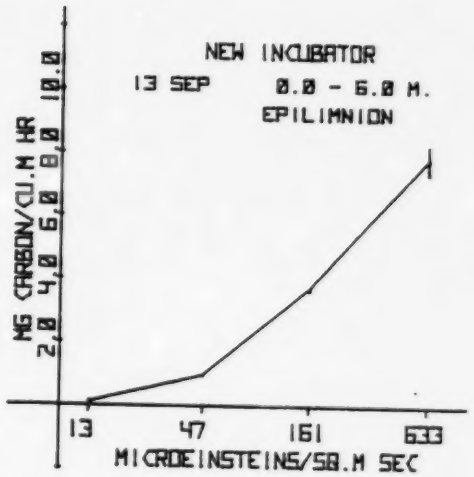
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
30 AUG 6.0 - 8.0 M.
METALIMNION
MG CARBON/CU.M HR
4 7 11 14 18
5 21 75 299
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
13 SEP 0.0 - 6.0 M.
EPILIMNION
MG CARBON/CU.M HR
2,0 4,0 6,0 8,0 10,0
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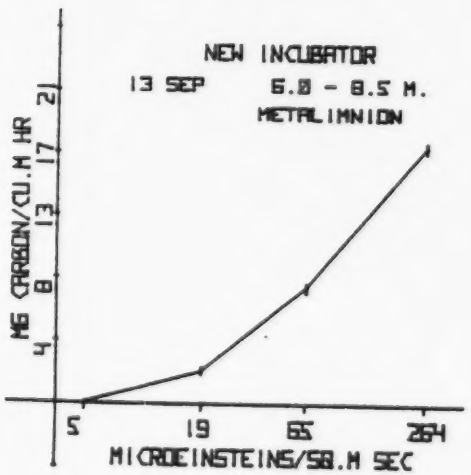
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
13 SEP 6.0 - 8.5 M.
METALIMNION
MG CARBON/CU.M HR
4 8 13 17 21
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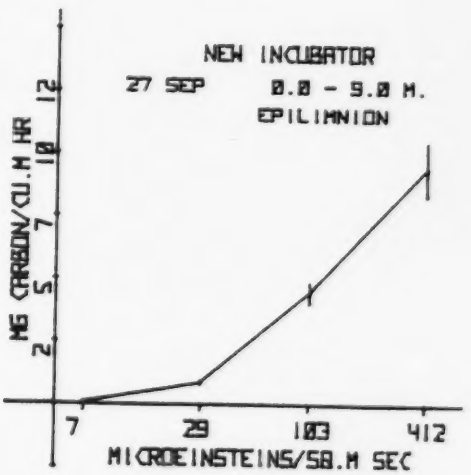
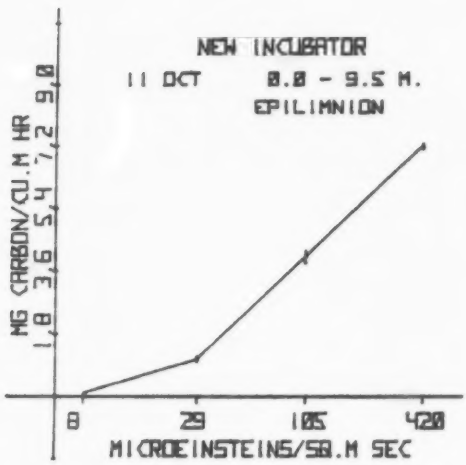
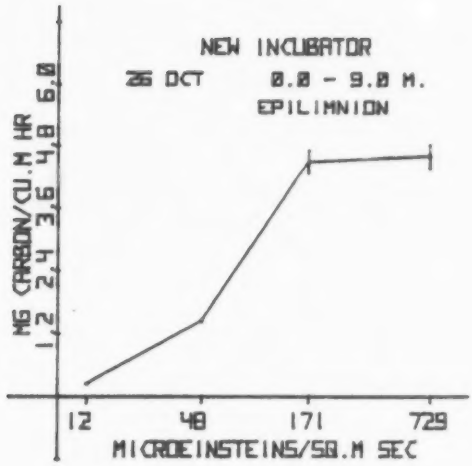
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
27 SEP 0.0 - 9.0 M.
EPILIMNION
MG CARBON/CU.M HR
2 5 7 10 12
7 29 103 412
MICROEINSTEINS/SQ.M SEC

LAKE 302 S


NEW INCUBATOR
11 OCT 0.0 - 9.5 M.
EPILIMNION
MG CARBON/CU.M HR
1,8 3,6 5,4 7,2 9,0
8 29 105 420
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
26 OCT 0.0 - 9.0 M.
EPILIMNION
MG CARBON/CU.M HR
1,2 2,4 3,6 4,8 6,0
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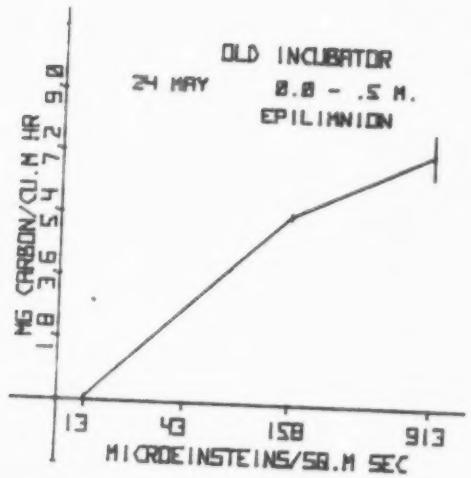
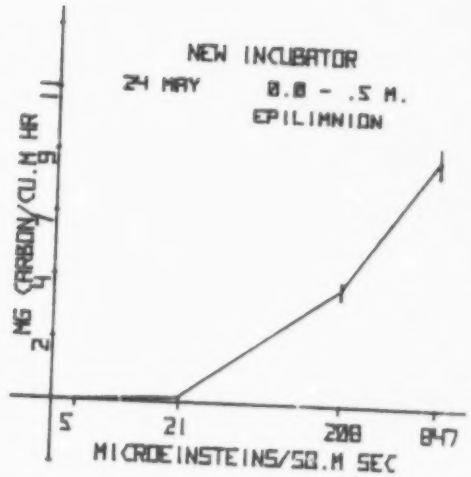
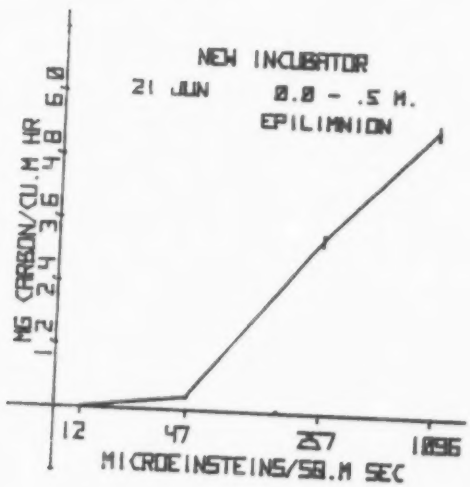
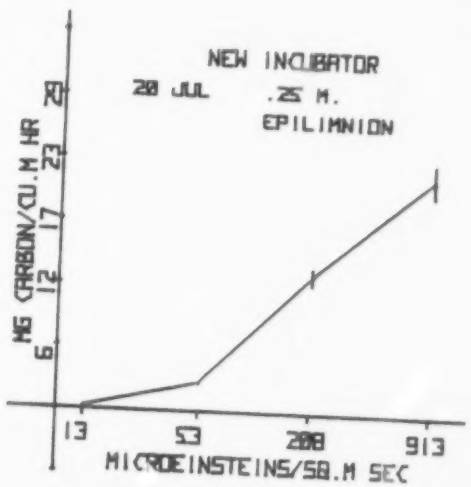
MICROEINSTEINS/SQ.M SEC


OLD INCUBATOR
24 MAY 0.0 - .5 M.
EPILIMNION
MG CARBON/CU.M HR
1.8 3.6 5.4 7.2 9.0
13 43 158 913
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
24 MAY 0.0 - .5 M.
EPILIMNION
MG CARBON/CU.M HR
2 4 6 11
5 21 208 847
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
21 JUN 0.0 - .5 M.
EPILIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
12 47 257 1896
MICROEINSTEINS/SQ.M SEC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20 JUL .25 M.
EPILIMNION
MG CARBON/CU.M HR
6 12 17 23 29
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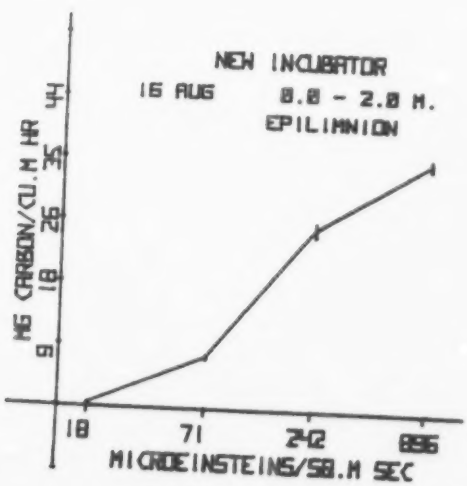
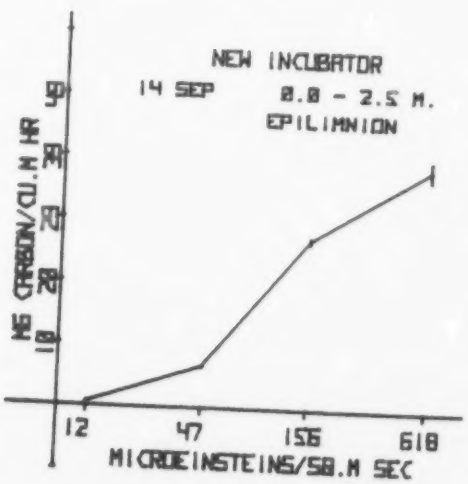
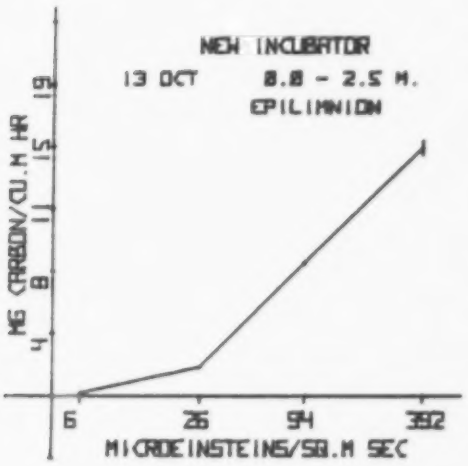
MICROEINSTEINS/SQ.M SEC

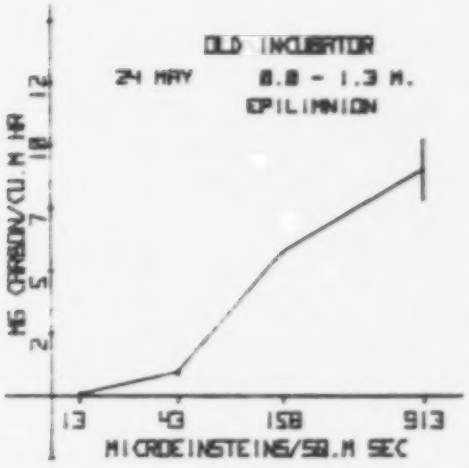

NEW INCUBATOR
16 AUG 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
9 18 26 35 44
18 71 242 896
MICROEINSTEINS/SQ.M SEC

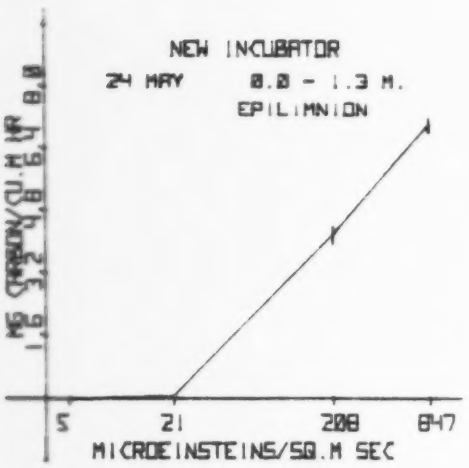

NEW INCUBATOR
14 SEP 0.0 - 2.5 M.
EPILIMNION
MG CARBON/CU.M HR
10 20 29 39 49
12 47 156 618
MICROEINSTEINS/SQ.M SEC

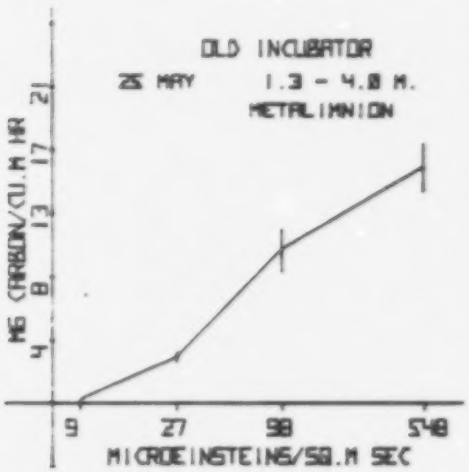
LAKE 303

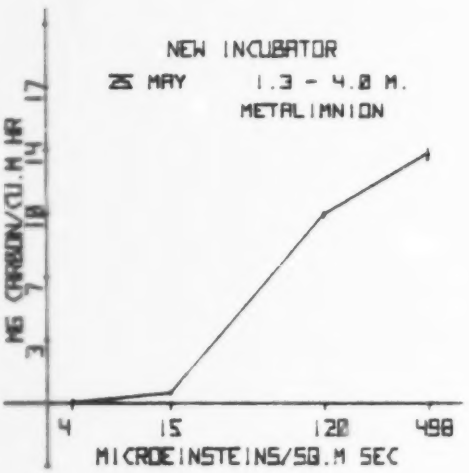

NEW INCUBATOR
13 OCT 0.0 - 2.5 M.
EPILIMNION
MG CARBON/CU.M HR
4
8
11
15
19
6
26
94
352
MICROEINSTEINS/SQ.M SEC

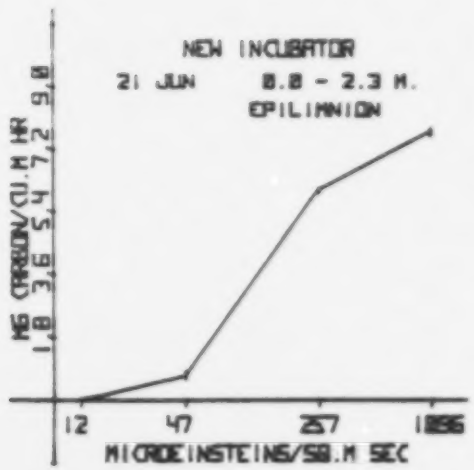
LAKE 304

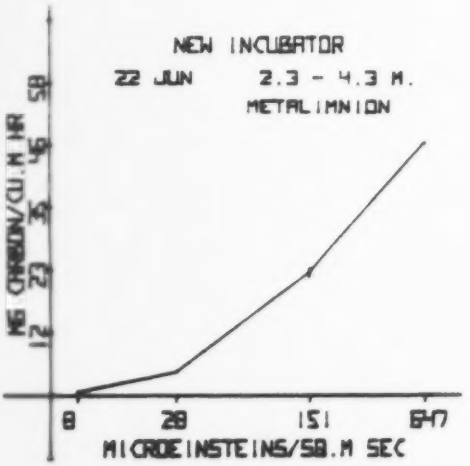

OLD INCUBATOR
24 MAY 0.0 - 1.3 M.
EPILIMNION
MG CARBON/CU.M HR
2 5 7 10 12
13 43 158 913
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
24 MAY 0.0 - 1.3 M.
EPILIMNION
MG CARBON/CU.M HR
1.6 3.2 4.8 6.4 8.0
5 21 208 847
MICROEINSTEINS/SQ.M SEC

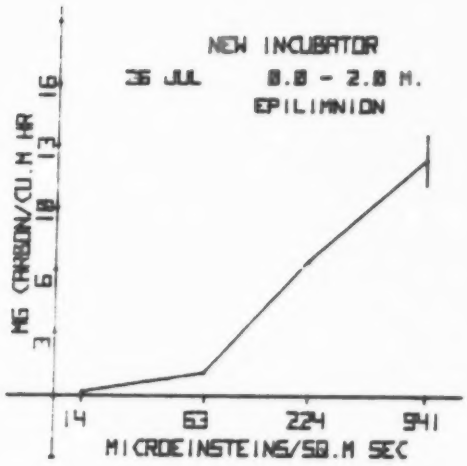

OLD INCUBATOR
25 MAY 1.3 - 4.0 M.
METALIMNION
MG CARBON/CU.M HR
4 8 13 17 21
9 27 98 548
MICROEINSTEINS/SQ.M SEC

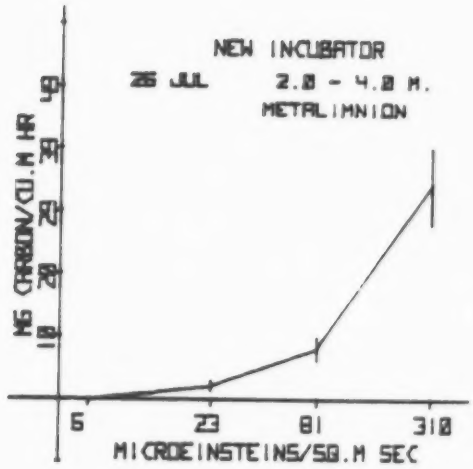

NEW INCUBATOR
25 MAY 1.3 - 4.0 M.
METALIMNION
MG CARBON/CU.M HR
3 7 10 14 17
4 15 120 498
MICROEINSTEINS/SQ.M SEC

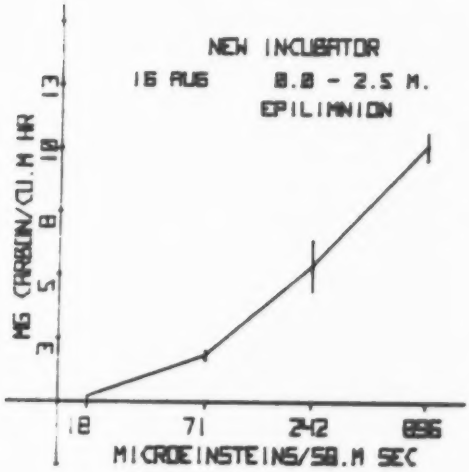

NEW INCUBATOR
21 JUN 0.0 - 2.3 M.
EPILIMNION
MG CARBON/CU.M HR
1.8 3.6 5.4 7.2 9.0
12 47 257 1886
MICROEINSTEINS/SQ.M SEC

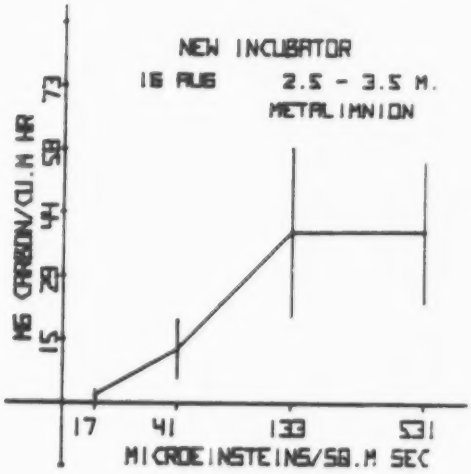

NEW INCUBATOR
22 JUN 2.3 - 4.3 M.
METALIMNION
MG CARBON/CU.M HR
12 23 35 46 58
8 28 151 847
MICROEINSTEINS/SQ.M SEC

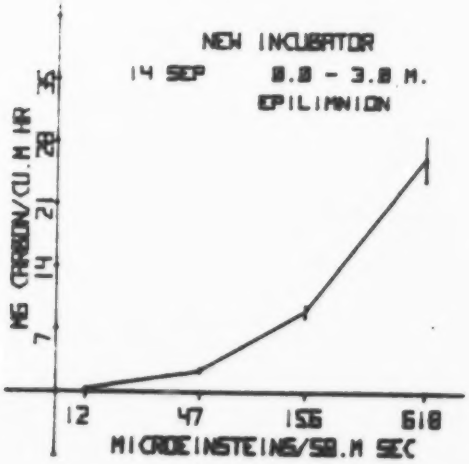
LAKE 304

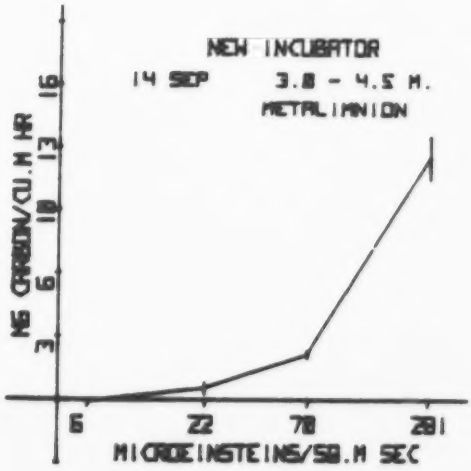

NEW INCUBATOR
26 JUL 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
3 6 10 13 16
14 63 224 941
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
26 JUL 2.0 - 4.0 M.
METALIMNION
MG CARBON/CU.M HR
18 20 23 30 45
6 23 81 310
MICROEINSTEINS/SQ.M SEC

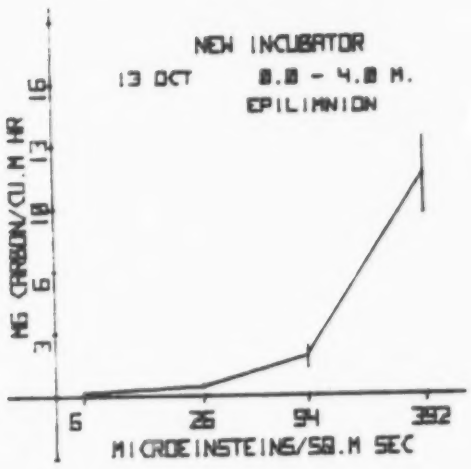

NEW INCUBATOR
16 AUG 0.0 - 2.5 M.
EPILIMNION
MG CARBON/CU.M HR
3 5 8 10 13
18 71 242 886
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
16 AUG 2.5 - 3.5 M.
METALIMNION
MG CARBON/CU.M HR
15 29 44 58 73
17 41 133 531
MICROEINSTEINS/SQ.M SEC

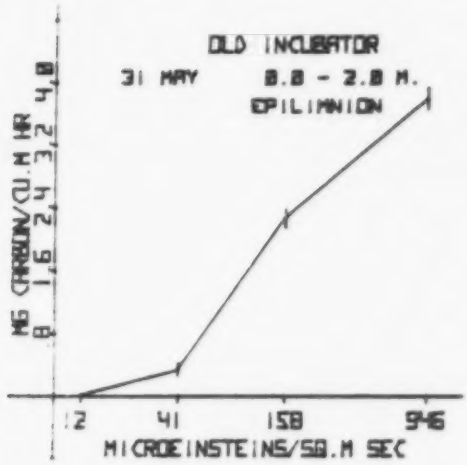

NEW INCUBATOR
14 SEP 0.0 - 3.0 M.
EPILIMNION
MG CARBON/CU.M HR
7 14 21 28 35
12 47 155 618
MICROEINSTEINS/SQ.M SEC

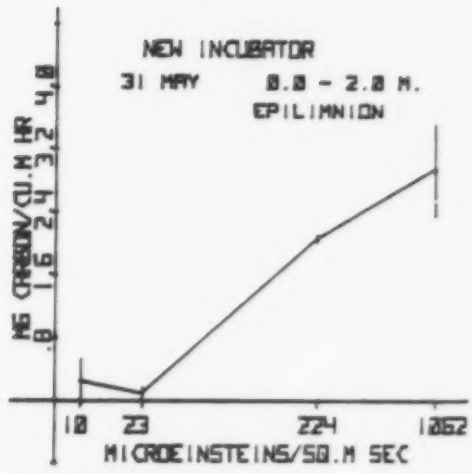

NEW INCUBATOR
14 SEP 3.0 - 4.5 M.
METALIMNION
MG CARBON/CU.M HR
3 6 10 13 16
6 22 78 281
MICROEINSTEINS/SQ.M SEC

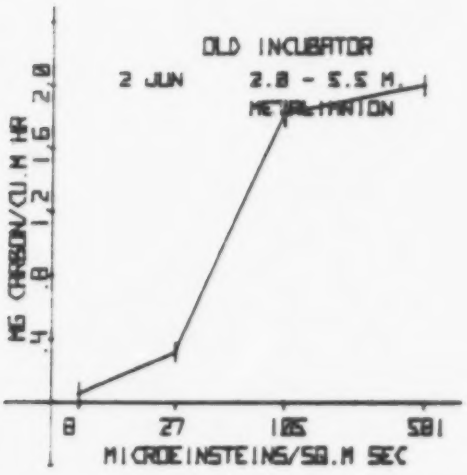
LAKE 304

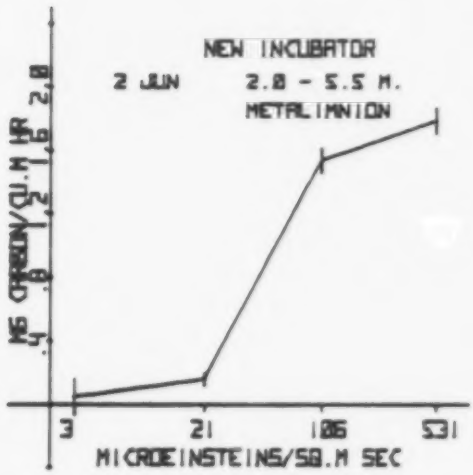

NEW INCUBATOR
13 OCT 0.0 - 4.0 M.
EPILIMNION
MG CARBON/CU.M HR
3
6
10
13
16
6
26
94
392
MICROEINSTEINS/SQ.M SEC

LAKE 305

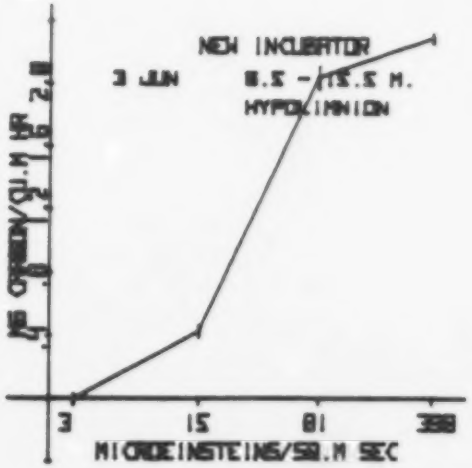

OLD INCUBATOR
31 MAY 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
0 1.6 2.4 3.2 4.0
12 41 158 946
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
31 MAY 0.0 - 2.0 M.
EPILIMNION
MG CARBON/CU.M HR
0 1.6 2.4 3.2 4.0
10 23 224 1052
MICROEINSTEINS/SQ.M SEC

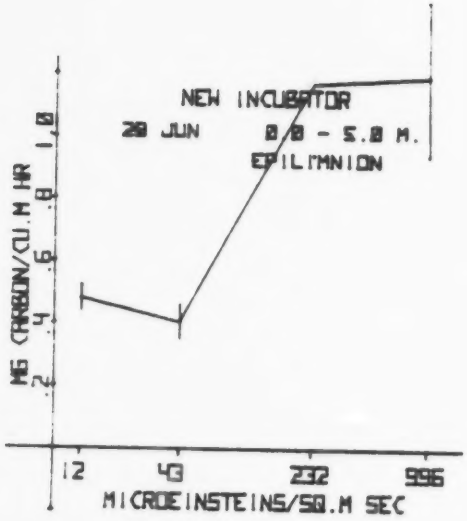

OLD INCUBATOR
2 JUN 2.0 - 5.5 M.
METALIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.0
8 27 185 581
MICROEINSTEINS/SQ.M SEC

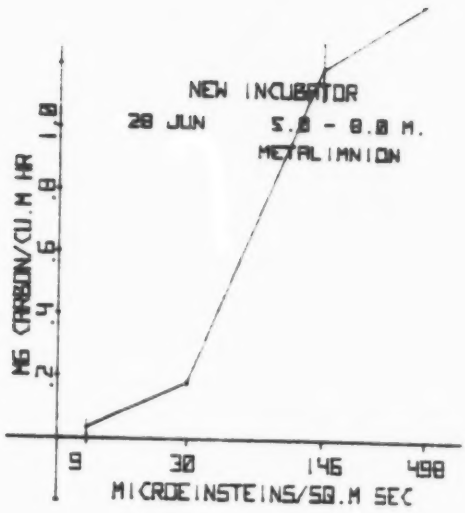

NEW INCUBATOR
2 JUN 2.0 - 5.5 M.
METALIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.0
3 21 186 531
MICROEINSTEINS/SQ.M SEC

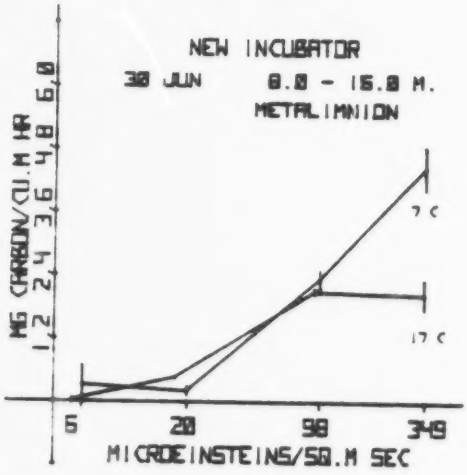
OLD INCUBATOR
3 JUN 8.5 - 15.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
6 19 75 432
MICROEINSTEINS/SQ.M SEC

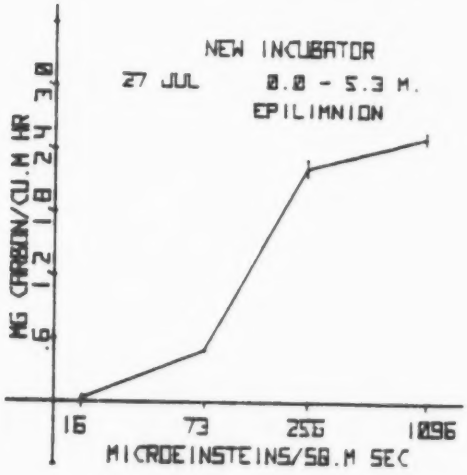

NEW INCUBATOR
3 JUN 8.5 - 15.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.0
3 15 81 398
MICROEINSTEINS/SQ.M SEC

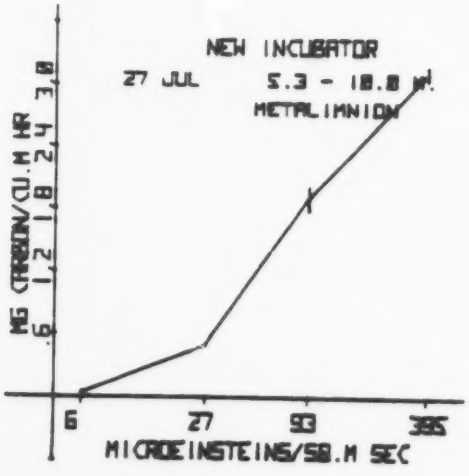
LAKE 305

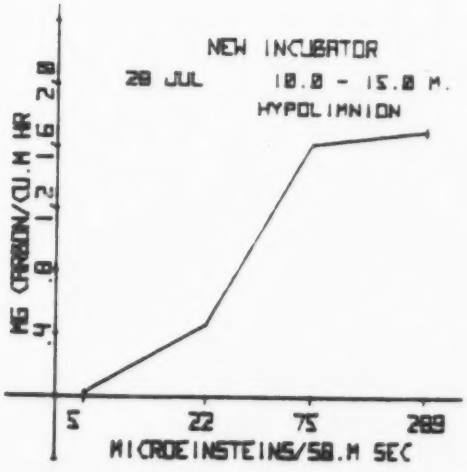

NEW INCUBATOR
28 JUN 0.0 - 5.0 M.
EPILIMNION
MG CARBON/CU.M HR
.2 .4 .6 .8 1.0
12 43 232 996
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
28 JUN 5.0 - 8.0 M.
METALIMNION
MG CARBON/CU.M HR
.2 .4 .6 .8 1.0
9 30 146 498
MICROEINSTEINS/SQ.M SEC

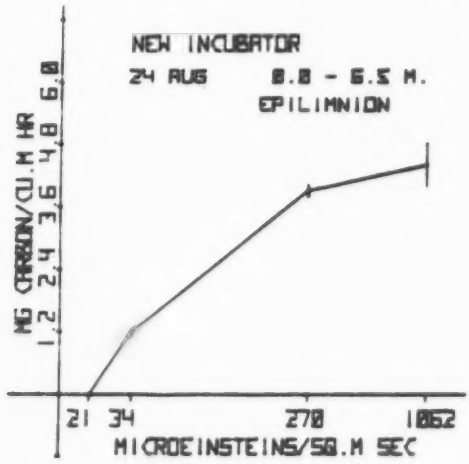

NEW INCUBATOR
30 JUN 0.0 - 15.0 M.
METALIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
7 C
17 C
6 20 98 349
MICROEINSTEINS/SQ.M SEC

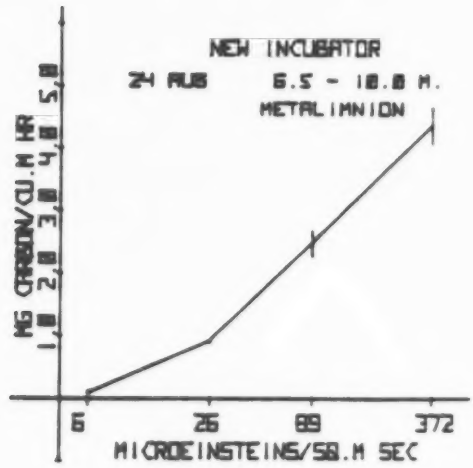

NEW INCUBATOR
27 JUL 0.0 - 5.3 M.
EPILIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
16 73 256 1096
MICROEINSTEINS/SQ.M SEC

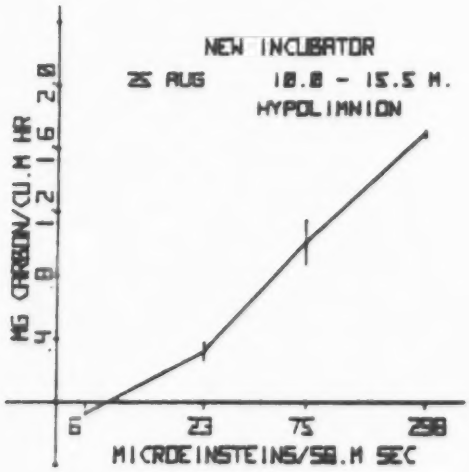

NEW INCUBATOR
27 JUL 5.3 - 18.0 M.
METALIMNION
MG CARBON/CU.M HR
.6 1.2 1.8 2.4 3.0
6 27 93 395
MICROEINSTEINS/SQ.M SEC

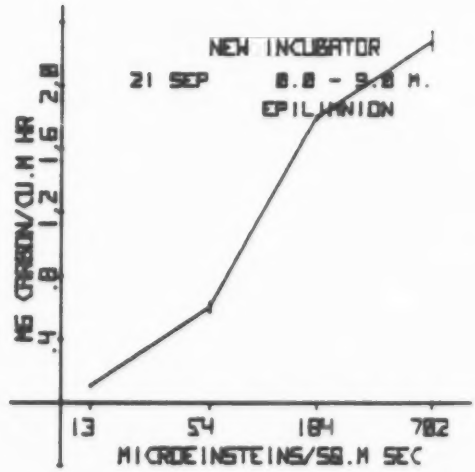

NEW INCUBATOR
28 JUL 18.0 - 15.0 M.
HYPOLIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.0
5 22 75 289
MICROEINSTEINS/SQ.M SEC

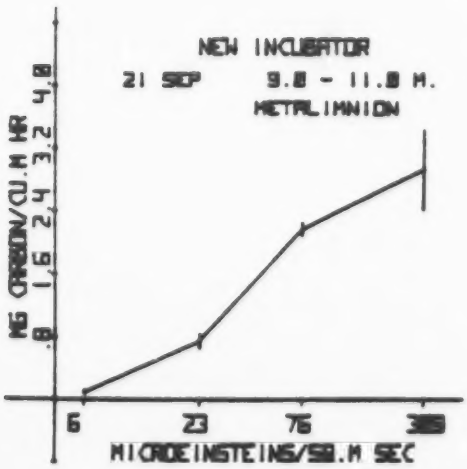
LAKE 305

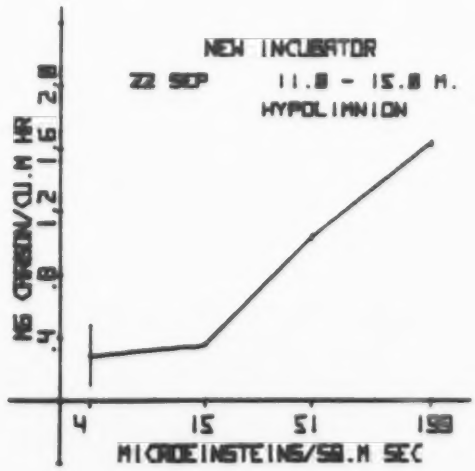

NEW INCUBATOR
24 AUG 8.8 - 6.5 M.
EPILIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
21 34 270 1052
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
24 AUG 6.5 - 10.0 M.
METALIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
6 26 89 372
MICROEINSTEINS/SQ.M SEC

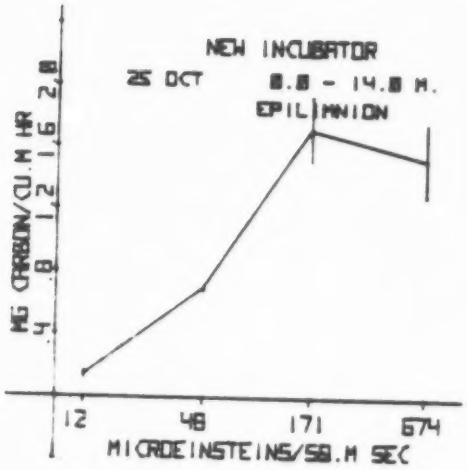

NEW INCUBATOR
25 AUG 10.0 - 15.5 M.
HYPOLIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.0
6 23 75 298
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
21 SEP 8.8 - 9.8 M.
EPILIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.0
13 54 184 782
MICROEINSTEINS/SQ.M SEC

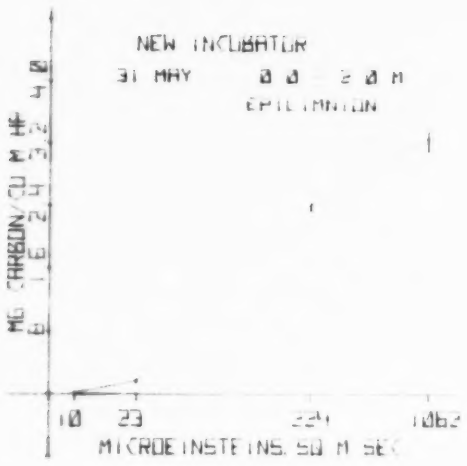

NEW INCUBATOR
21 SEP 9.8 - 11.8 M.
METALIMNION
MG CARBON/CU.M HR
.8 1.6 2.4 3.2 4.0
6 23 76 308
MICROEINSTEINS/SQ.M SEC

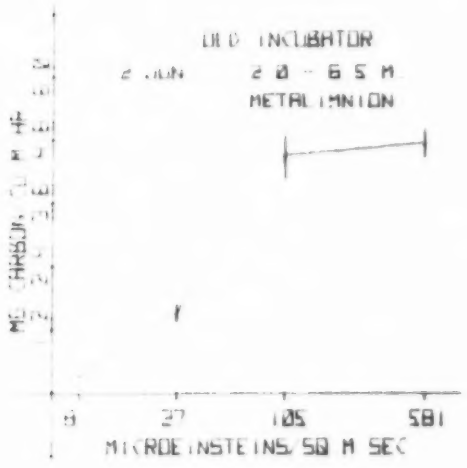

NEW INCUBATOR
22 SEP 11.8 - 15.8 M.
HYPOLIMNION
MG CARBON/CU.M HR
.4 .8 1.2 1.6 2.0
4 15 51 199
MICROEINSTEINS/SQ.M SEC

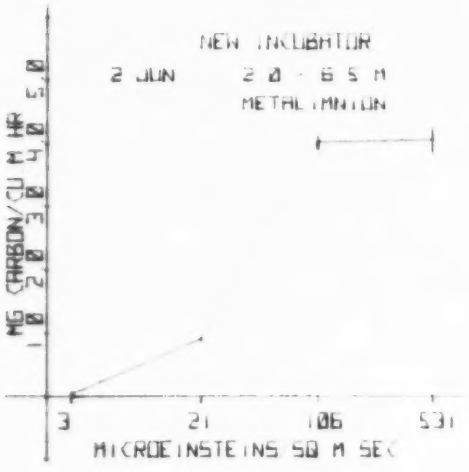
LAKE 305

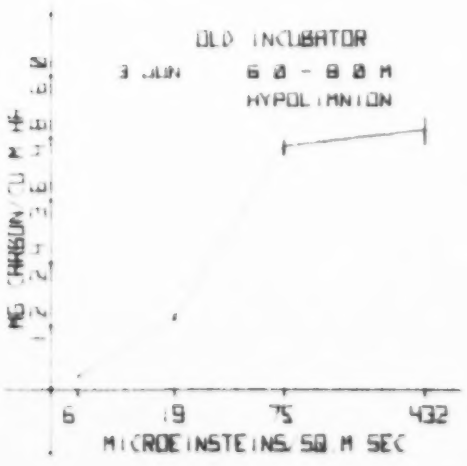

NEW INCUBATOR
25 OCT
0.0 - 14.0 M.
EPILIMNION
MG CARBON/CU.M HR
.4
.8
1.2
1.6
2.0
12
48
171
674
MICROEINSTEINS/SQ.M SEC

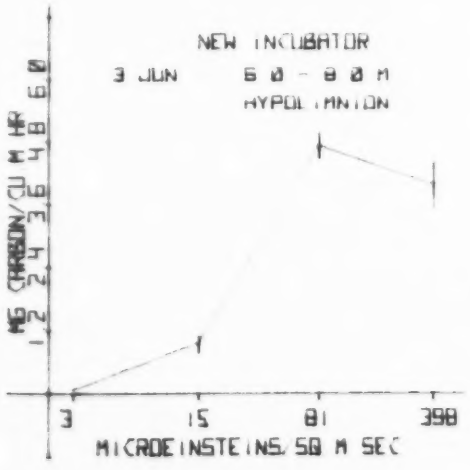
OLD INCUBATOR
31 MAY 0 0 - 2 0 M
EPILIMNION
MICROEINSTEINS SQ M SEC


NEW INCUBATOR
31 MAY 0 0 - 2 0 M
EPILIMNION
MG CARBON/CU M HR
10 23
MICROEINSTEINS SQ M SEC

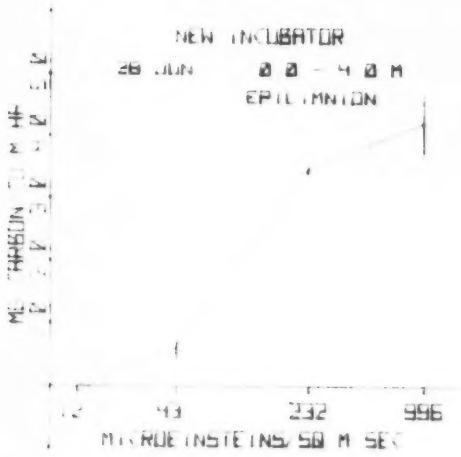

OLD INCUBATOR
2 JUN 2 0 - 6 5 M
METALIMNION
MG CARBON/CU M HR
8 37 105 581
MICROEINSTEINS SQ M SEC

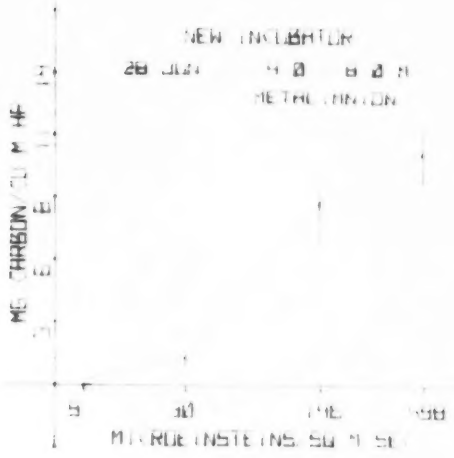

NEW INCUBATOR
2 JUN 2 0 - 6 5 M
METALIMNION
MG CARBON/CU M HR
3 21 106 531
MICROEINSTEINS SQ M SEC

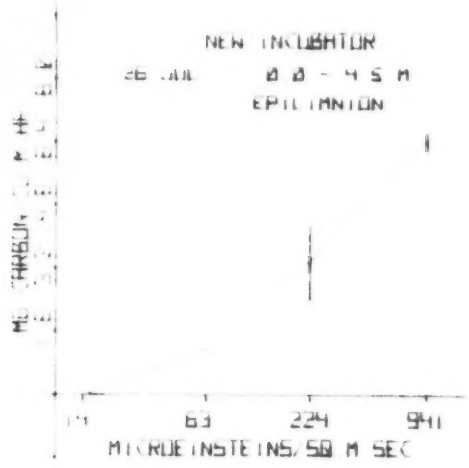

OLD INCUBATOR
3 JUN 6 0 - 8 0 M
HYPOLIMNION
MG CARBON/CU M HR
6 19 75 432
MICROEINSTEINS SQ M SEC

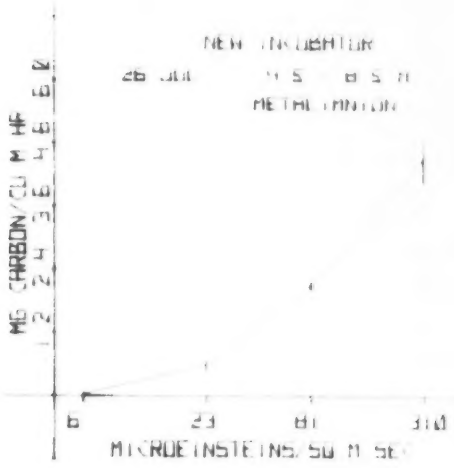

NEW INCUBATOR
3 JUN 6 0 - 8 0 M
HYPOLIMNION
MG CARBON/CU M HR
3 15 81 398
MICROEINSTEINS SQ M SEC

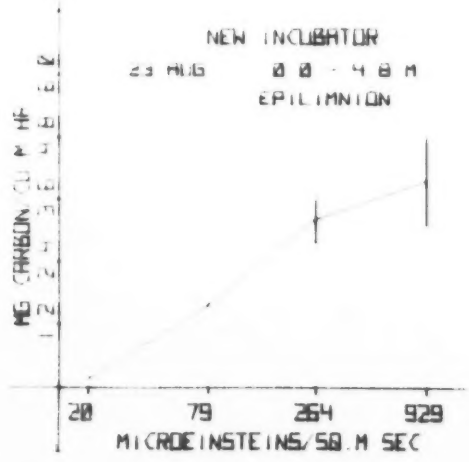
LAKE 3812

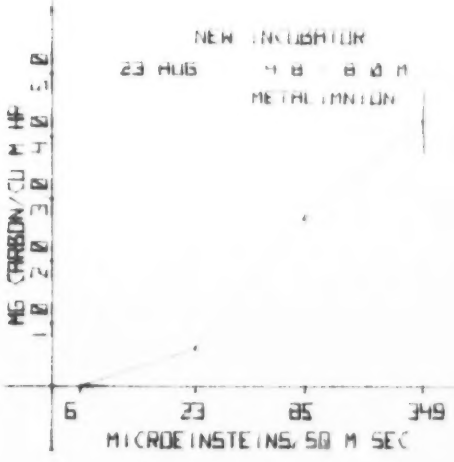

NEW INCUBATOR
26 JUN 0 0 - 4 0 M
EPILIMNION
MG CARBON/CU M HR
232
996
MICROEINSTEINS/SQ M SEC


NEW INCUBATOR
26 JUN 4 0 - 8 0 M
METALIMNION
MG CARBON/CU M HR
MICROEINSTEINS/SQ M SEC

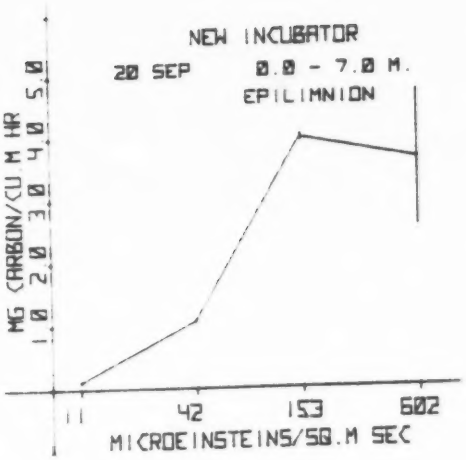

NEW INCUBATOR
26 JUN 0 0 - 4 5 M
EPILIMNION
MG CARBON/CU M HR
63
224
941
MICROEINSTEINS/SQ M SEC


NEW INCUBATOR
26 JUN 4 5 - 8 5 M
METALIMNION
MG CARBON/CU M HR
6
23
81
310
MICROEINSTEINS/SQ M SEC


NEW INCUBATOR
23 AUG 0 0 - 4 0 M
EPILIMNION
MG CARBON/CU M HR
20
79
264
929
MICROEINSTEINS/SQ M SEC


NEW INCUBATOR
23 AUG 4 0 - 8 0 M
METALIMNION
MG CARBON/CU M HR
6
23
85
349
MICROEINSTEINS/SQ M SEC

LAKE 382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MG CARBON/CU M HR
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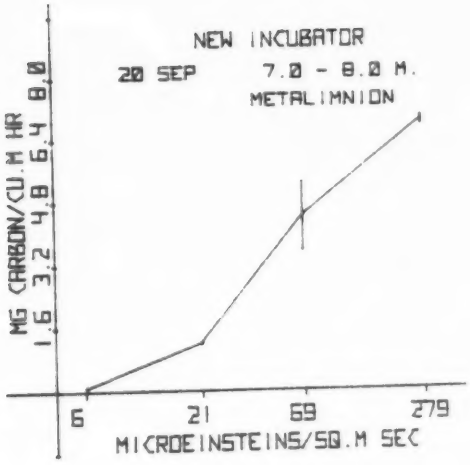
MICROEINSTEINS/SQ.M SEC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MG CARBON/CU.M HR
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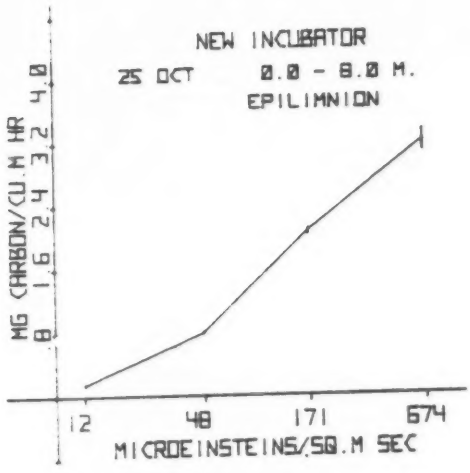
MICROEINSTEINS/SQ.M SEC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MG CARBON/CU.M HR
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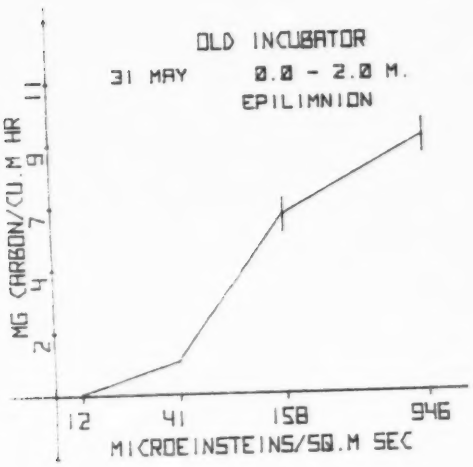
12 48 171 674
MICROEINSTEINS/SQ.M SEC

LAKE 382 BAY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EPILIMNION
MG CARBON/CU.M HR
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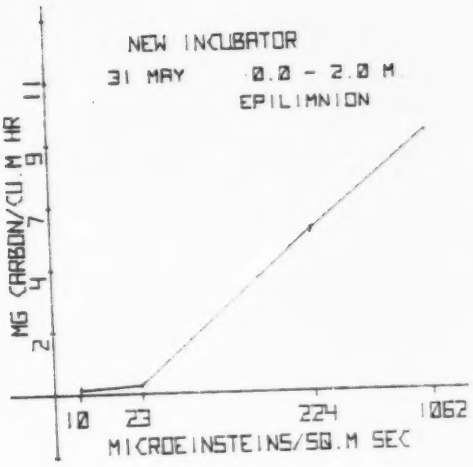
12 41 158 946
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
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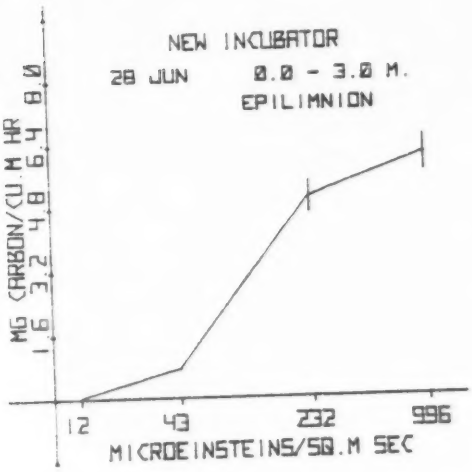
10 23 224 1062
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
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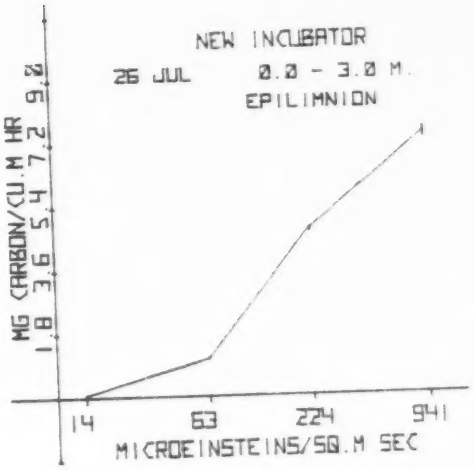
MICROEINSTEINS/SQ.M SEC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MG CARBON/CU.M HR
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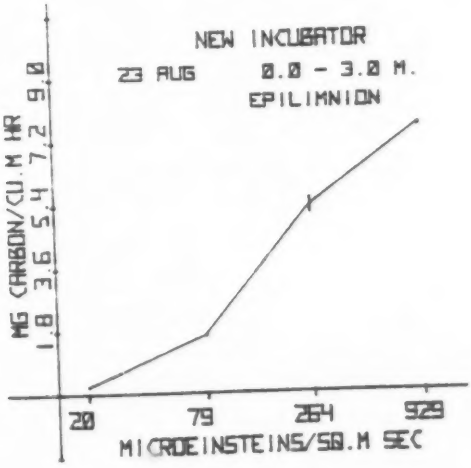
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
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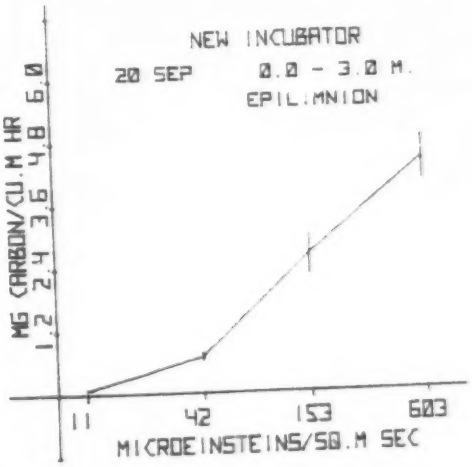
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
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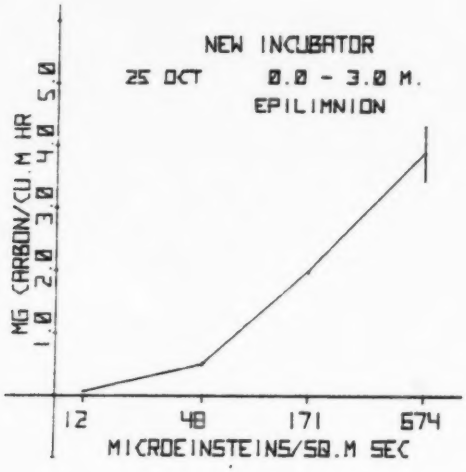
MICROEINSTEINS/SQ.M SEC

LAKE 382 BAY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EPILIMNION
MG CARBON/CU.M HR
1.0 2.0 3.0 4.0 5.0
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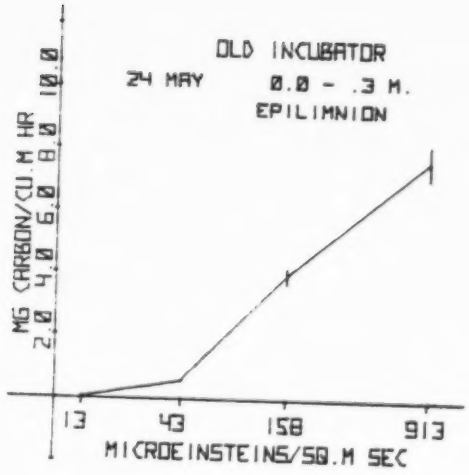
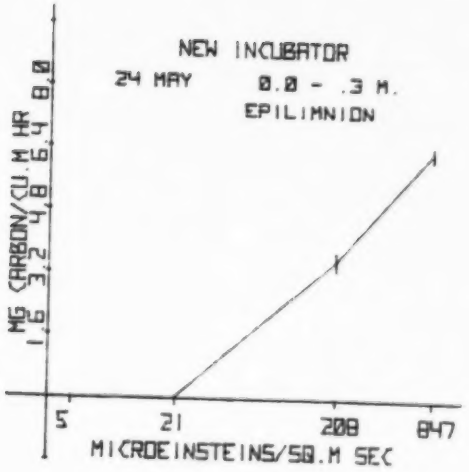
MICROEINSTEINS/SQ.M SEC

LAKE 661


OLD INCUBATOR
24 MAY 0.0 - .3 M.
EPILIMNION
MG CARBON/CU.M HR
2.0 4.0 6.0 8.0 10.0
13 43 158 913
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
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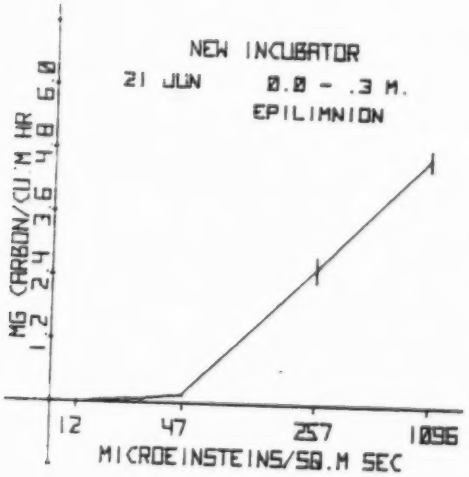
5 21 208 847
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
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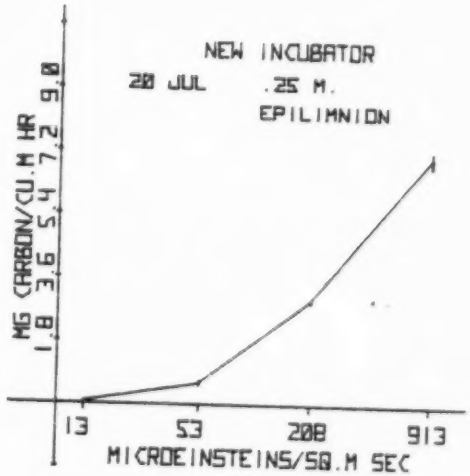
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
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EPILIMNION
MG CARBON/CU.M HR
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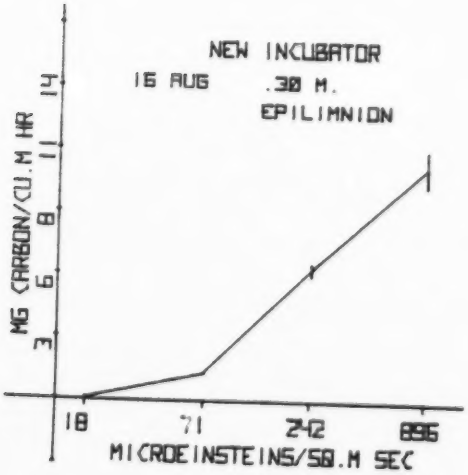
13 53 208 913
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
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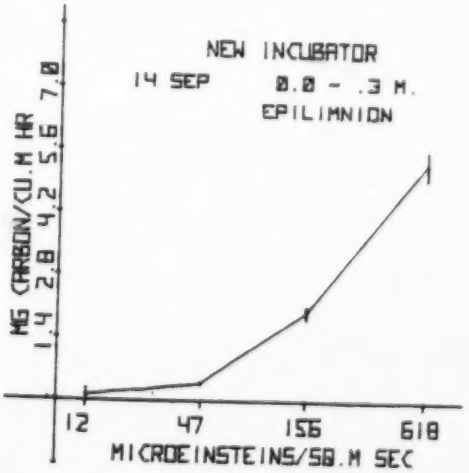
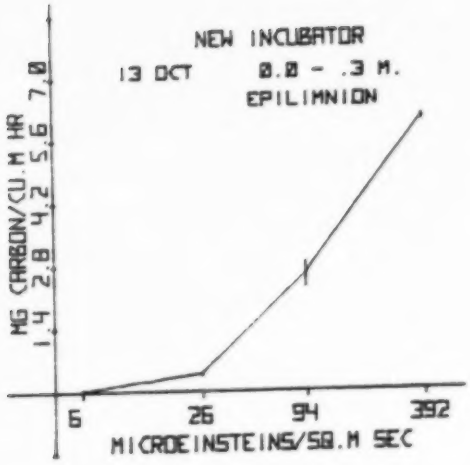
18 71 242 896
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
14 SEP 0.0 - .3 M.
EPILIMNION
MG CARBON/CU.M HR
1.4 2.8 4.2 5.6 7.0
12 47 156 618
MICROEINSTEINS/SQ.M SEC

LAKE 661


NEW INCUBATOR
13 OCT 0.0 - .3 M.
EPILIMNION
MG CARBON/CU.M HR
1.4 2.8 4.2 5.6 7.0
6
26
94
392
MICROEINSTEINS/SQ.M SEC

APPENDIX 3

"NEW SITE" LAKE BASINS"

Data relevant to each sampling time are listed chronologically according to lake basin.

"Inc Typ" refers to type of light incubator used for incubations. 0 - represents old incubator, 1 - represents new incubator.

The date stated is that of sample collection and incubation. The time of actual field collection is reported as Central Daylight Time.

The depth is the range from which the integrated water sample was taken.

Temperature is that at which the incubation was carried out and may vary ±1°C. Dissolved inorganic carbon (DIC) analysis was done on pre-incubation water samples. Units reported are micromoles L^{-1}. Values for suspended carbon and chlorophyll are in micrograms L^{-1}.

Values I1 through I4 are incubator irradiances in microeinsteins m^{-2} sec^{-1}.

Values P1 through P4 are rates of inorganic carbon uptake at the four separate incubator irradiances in units of milligrams carbon m^{-2} h^{-1}. The two given values at each irradiance are those of replicate samples.

The mean coefficient of variation (C.V.) of the four sets of replicates are given. $$$$$ occurs when negative values appear under P4 and P3 causing the C.V. value to exceed the field width of 999.9. See Note: 1 and 2.

Live biomass is calculated from algal cell counts and approximated cell volumes of the species encountered in the sample. Values are reported in grams m^{-3}.

Notes:

1. Production values are unusually erratic or differ from expected results and should be considered with caution.

2. Missing values are denoted with -10.00. The sample may have been lost during the incubation or not processed.
3. $NaHCO_3$ was added to the sample prior to incubation.
4. HCL was added to the sample prior to incubation.
5. Samples were incubated at a temperature other than from which the lake sample was taken.

LAKE 93

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	26 MAY	0.0- .3	1005	18.0	64	450	2.3	5	-.00 -.01	27	.10 .12	213	2.73 3.29	946	5.50 4.98	10.81	1.31	
1	8 JUL	.3- .3	1000	20.0	60	600	4.0	16	.48 .36	63	.48 .57	204	3.49 2.92	863	5.21 5.02	11.80	1.46	
1	17 AUG	.3- .3	1000	22.0	58	-10	4.1	16	-.01 -.03	65	.41 .38	234	3.25 3.00	963	4.68 4.20	6.27	1.66	2
1	29 SEP	0.0- .3	0945	13.5	105	710	5.2	8	-.09 -.11	31	.81 .63	101	4.21 4.21	408	9.39 8.31	8.56	1.95	

LAKE 110

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	8 JUL	.3- .3	0946	20.0	61	-10	-10.0	16	.13 .08	63	.90 .93	204	3.64 3.96	863	6.60 5.97	11.90	-10.00	2
1	17 AUG	.3- .3	0952	22.0	55	-10	-10.0	16	.05 -.38	65	.48 .63	234	3.33 1.78	963	2.49 2.89	28.25	-10.00	2
1	29 SEP	0.0- .3	0928	13.5	83	-10	-10.0	8	.04 .03	31	.72 .73	101	2.64 2.78	408	6.30 6.42	5.76	-10.00	2

LAKE 111

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	26 MAY	0.0- .3	0955	18.0	73	290	.9	5	-.04 -.03	27	.10 .08	213	2.71 2.53	946	3.83 3.75	6.20	.59	
1	8 JUL	.3- .3	0951	20.0	65	1960	1.4	16	.02 .04	63	.68 .41	204	1.87 2.23	863	4.84 5.32	28.42	2.39	
1	17 AUG	.3- .3	0955	22.0	62	-10	1.9	16	-.09 -.10	65	.28 .29	234	1.72 .80	963	3.49 3.06	21.50	.94	2
1	29 SEP	0.0- .3	0934	13.5	70	410	2.4	8	.06 .05	31	.42 .34	101	1.92 2.20	408	4.30 4.34	9.49	.66	

LAKE 373

INC TYP	DATE	DEPTH M.	TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	8 JUL	.3- .3	1012	20.0	148	150	1.3	16	-.13 -.14	58	.14 .45	201	.92 3.34	880	3.44 4.22	56.78	.62	
1	17 AUG	.3- .3	0948	22.0	152	-10	1.6	16	.99 -.05	65	.41 1.23	234	.93 3.27	963	3.80 4.19	78.46	.73	2
1	29 SEP	0.0- .3	0957	13.5	148	470	2.0	6	-.04 -.03	23	.19 .31	88	1.51 1.69	367	3.99 4.12	13.90	.42	

LAKE 375

INC TYP	DATE	DEPTH M.		TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	8 JUL	.3-	.3	1012	20.0	314	430	2.0	14	-.45 -.41	58	.23 -.02	201	2.00 2.18	880	3.62 3.10	59.88	.66	2
1	17 AUG	.3-	.3	0946	22.0	294	-10	2.3	17	-.15 -.22	68	.27 .29	244	2.64 2.78	963	3.88 4.38	5.94	.77	2
1	29 SEP	0.0-	.3	1003	13.5	331	570	2.4	8	.07 .06	31	1.83 .39	101	1.84 1.76	408	4.08 2.14	35.90	.71	

LAKE 377

INC TYP	DATE	DEPTH M.		TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	8 JUL	.3-	.3	1041	20.0	104	270	1.0	16	.10 .09	63	.54 2.25	204	2.93 3.00	863	5.76 4.81	27.36	.87	
1	17 AUG	.3-	.3	0930	22.0	100	-10	2.2	15	.00 .21	65	.39 .36	234	2.00 .95	963	2.98 3.17	49.98	.78	2
1	29 SEP	0.0-	.3	1042	13.5	116	330	2.1	8	-.05 -.12	31	.25 .32	101	1.56 1.16	408	3.58 3.59	12.72	.68	

LAKE 421

INC TYP	DATE	DEPTH M.		TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	26 MAY	0.0-	.3	1020	18.0	153	690	2.1	5	-.07 -.05	27	.03 .05	213	3.06 3.04	946	4.92 4.39	15.58	2.03	
1	8 JUL	.3-	.3	1033	20.0	139	960	5.3	16	-.04 .06	63	.73 .58	204	4.78 4.35	863	6.72 6.91	8.08	3.24	
1	17 AUG	.3-	.3	0938	22.0	127	-10	4.2	17	.11 .10	68	1.58 1.43	244	6.03 3.96	963	8.85 8.92	11.25	1.30	2
1	29 SEP	0.0-	.3	1029	13.5	168	1400	5.9	6	.19 .41	23	1.97 2.17	88	9.57 8.68	367	13.19 14.83	18.86	.98	

LAKE 428

INC TYP	DATE	DEPTH M.		TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	26 MAY	0.0-	.3	1015	18.0	95	520	2.3	5	-.03 -.03	27	.16 .16	213	4.00 5.17	946	5.54 7.15	12.38	1.78	
1	8 JUL	.3-	.3	1021	20.0	89	700	4.9	14	.09 .04	58	.70 1.05	201	4.58 4.70	880	7.04 6.93	23.43	1.92	
1	17 AUG	.3-	.3	0943	22.0	84	-10	3.3	17	.04 .04	68	.76 .82	244	3.86 4.36	963	5.67 5.76	5.13	1.34	2
1	29 SEP	0.0-	.3	1012	13.5	111	770	4.9	6	.05 .19	23	.58 .74	88	2.86 3.06	367	7.27 6.95	26.81	1.20	

LAKE 430

INC TYP	DATE	DEPTH M.		TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	8 JUL	.3-	.3	1027	20.0	85	530	6.0	14	.48 .08	58	1.16 1.02	201	5.47 5.32	880	14.84 10.77	33.80	1.15	
1	17 AUG	.3-	.3	0940	22.0	77	-10	9.1	17	.13 .13	68	1.85 1.31	244	5.51 4.03	963	13.71 14.34	12.84	1.67	2
1	29 SEP	0.0-	.3	1022	13.5	141	500	1.4	6	-.02 -.06	23	.48 .43	88	2.04 2.09	367	8.05 9.29	6.42	1.14	

LAKE 622

INC TYP	DATE	DEPTH M.		TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	26 MAY	0.0-	.3	1010	18.0	103	350	1.5	5	-.02 .00	27	.13 .15	213	2.48 3.60	946	5.04 6.28	16.61	.97	
1	8 JUL	.3-	.3	1005	20.0	102	700	2.8	14	.06 .16	58	1.04 1.28	201	1.43 2.43	880	3.46 4.47	33.78	.84	
1	17 AUG	.3-	.3	1003	22.0	95	-10	2.5	17	-.19 -.23	68	-.57 .70	244	.85 2.48	963	4.30 4.24	28.16	.55	2
1	29 SEP	0.0-	.3	0950	13.5	136	350	2.9	6	.04 .01	23	-10.00 -10.00	88	2.21 2.46	367	7.09 6.25	30.01	.69	

LAKE 629

INC TYP	DATE	DEPTH M.		TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
I	26 MAY	0.0-	.3	1000	18.0	72	370	1.3	5	.00 -.02	27	.15 .14	213	2.12 3.00	946	4.76 3.55	16.35	1.14	
1	8 JUL	.3-	.3	0956	20.0	69	230	2.4	16	.02 .06	63	.82 1.11	204	2.97 4.05	863	5.04 6.04	28.83	.62	
1	17 AUG	.3-	.3	0958	22.0	56	-10	2.8	16	.06 .04	65	.76 .69	234	3.09 3.01	963	5.15 4.84	11.94	.76	2
1	29 SEP	0.0-	.3	0940	13.5	87	510	3.2	8	.09 .11	31	.84 .81	101	3.20 3.22	408	6.74 4.78	10.34	.63	

LAKE 658

INC TYP	DATE	DEPTH M.		TIME CDT	TEMP °C	DIC	SUSP CAR.	CHLOR A	I4	P4	I3	P3	I2	P2	I1	P1	C.V. (%)	BIO-MASS	NOTE
1	8 JUL	.3-	.3	1037	20.0	126	510	3.7	14	.73 .48	58	1.68 2.14	201	5.49 6.96	880	7.79 4.20	31.39	1.88	
1	17 AUG	.3-	.3	0935	22.0	117	-10	4.3	17	.07 .09	68	.84 .64	244	3.58 3.46	963	4.95 4.96	10.08	1.37	2
1	29 SEP	0.0-	.3	1035	13.5	174	550	4.8	6	.18 .37	23	1.08 1.16	88	3.85 5.40	367	11.37 10.61	20.13	1.28	

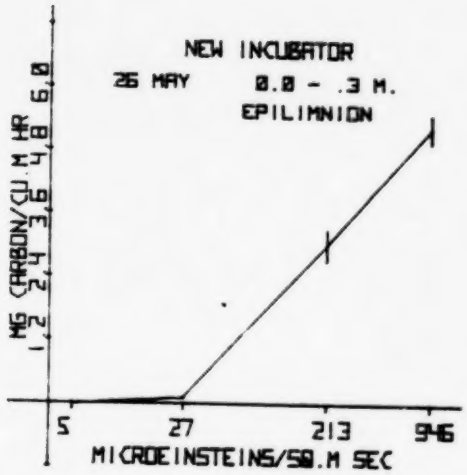
APPENDIX 4

"NEW SITE" LAKE BASINS

Plots of photosynthetic carbon uptake versus incubator irradiance are chronologically arranged according to lake basin. Irradiance is plotted on a logarithmic scale showing the actual light value. Production is plotted on a linear scale. The vertical bars of the plot join the replicate bottle values for each irradiance.

The light incubator type used to determine carbon uptake versus irradiance is shown on each plot as well as the date, depth and thermal zone.

MR noted onplot indicates missing replicate.


NEW INCUBATOR
26 MAY 0.0 - .3 M.
EPILIMNION
MG CARBON/CU.M HR
1,2 2,4 3,6 4,8 6,0
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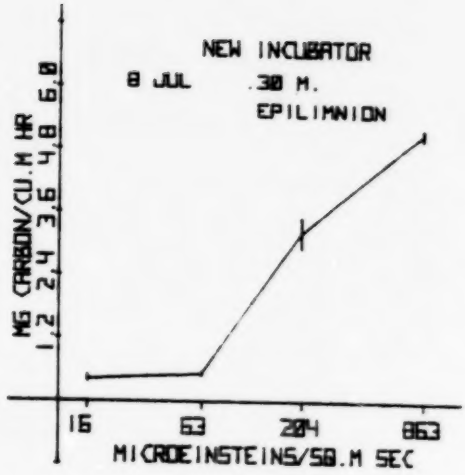
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
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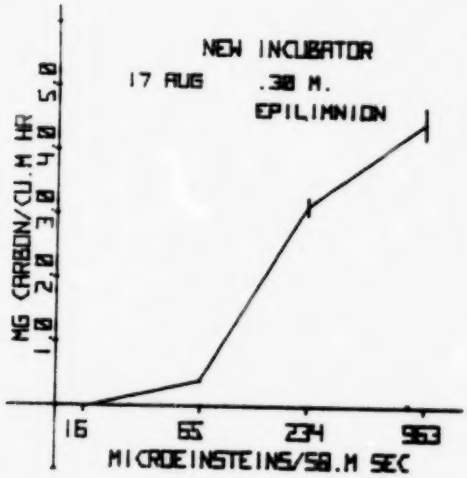
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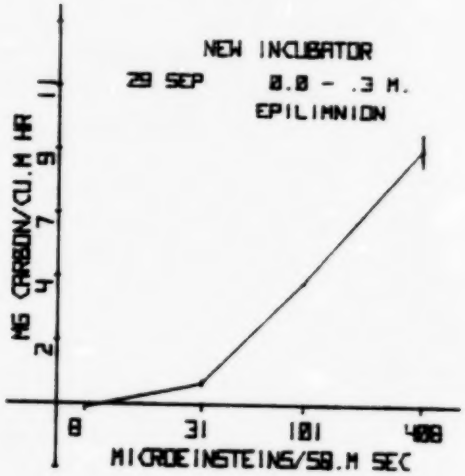
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
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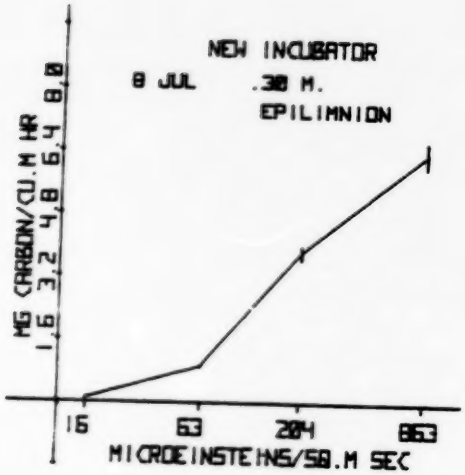
MICROEINSTEINS/SQ.M SEC

LAKE 110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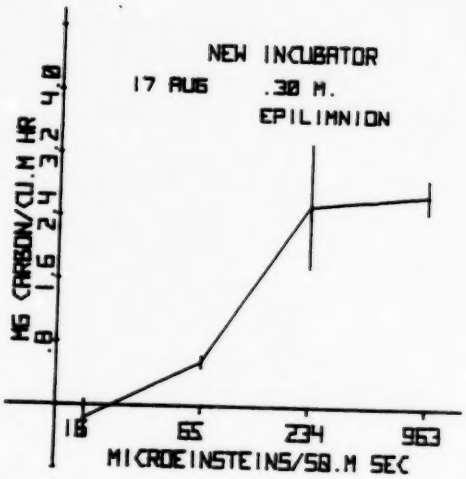
MICROEINSTEINS/SQ.M SEC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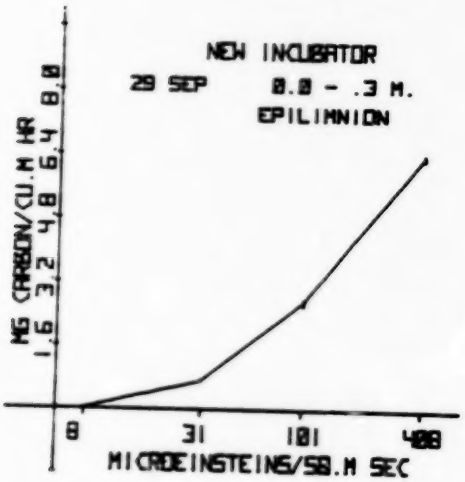
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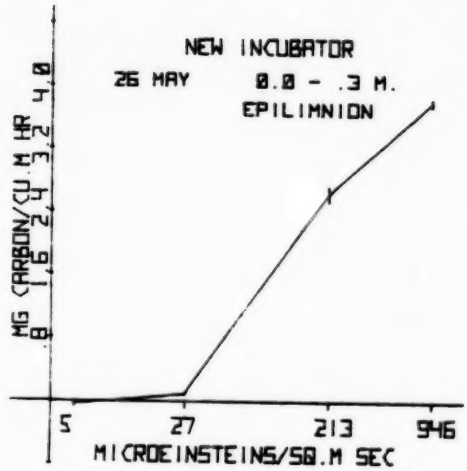
MICROEINSTEINS/SQ.M SEC

LAKE 111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MG CARBON/CU.M HR
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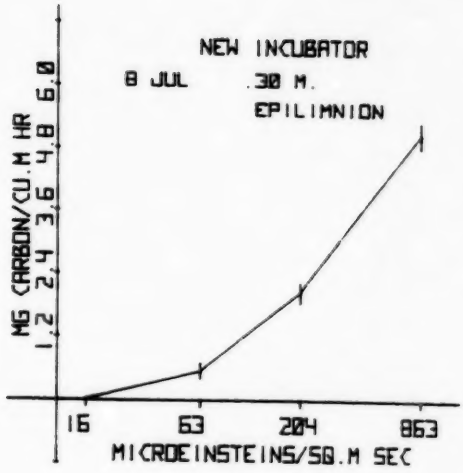
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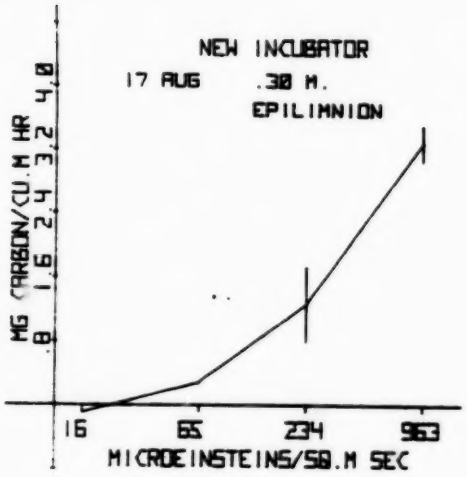
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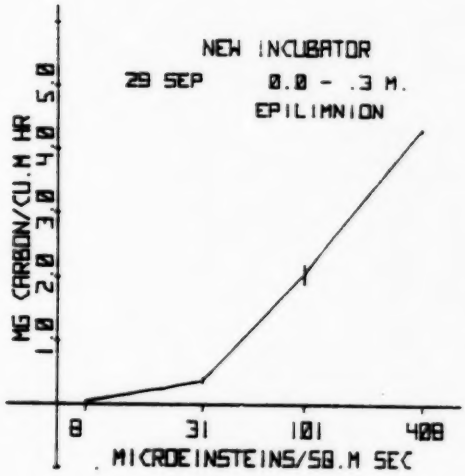
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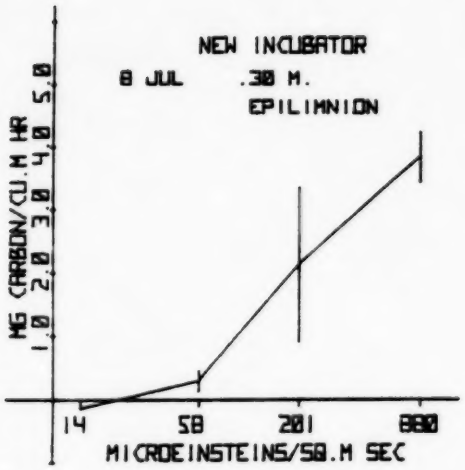
MICROEINSTEINS/SQ.M SEC

LAKE 373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MG CARBON/CU.M HR
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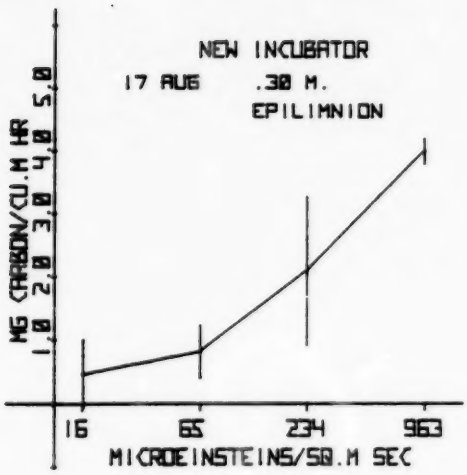
MICROEINSTEINS/SQ.M SEC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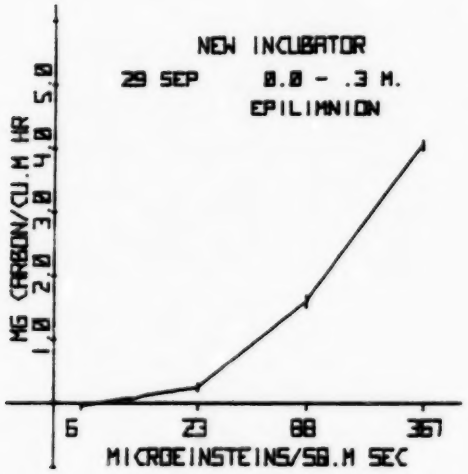
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MG CARBON/CU.M HR
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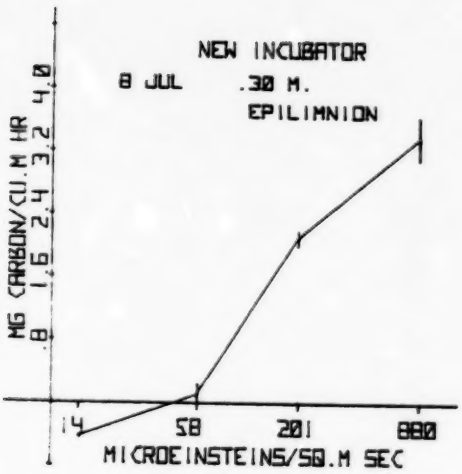
MICROEINSTEINS/SQ.M SEC

LAKE 375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MG CARBON/CU.M HR
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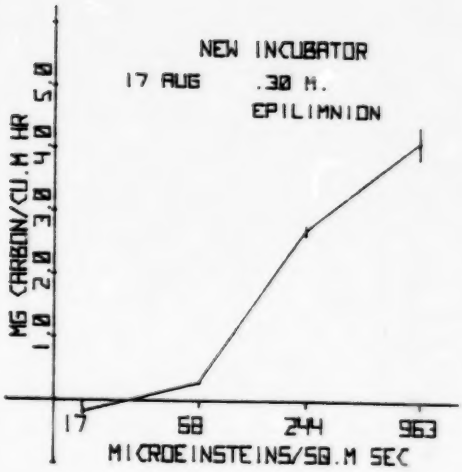
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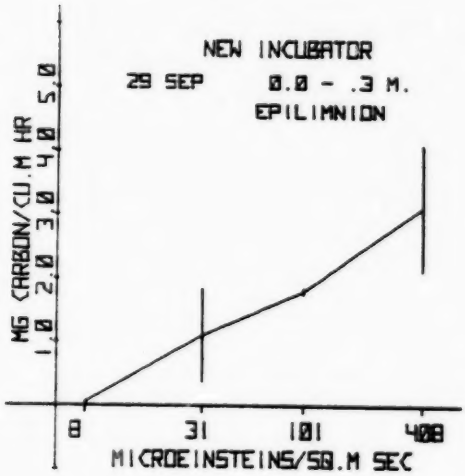
MICROEINSTEINS/SQ.M SEC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EPILIMNION
MG CARBON/CU.M HR
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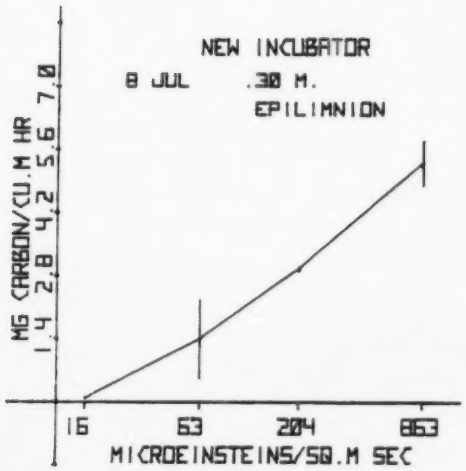
8 31 101 408
MICROEINSTEINS/SQ.M SEC

LAKE 377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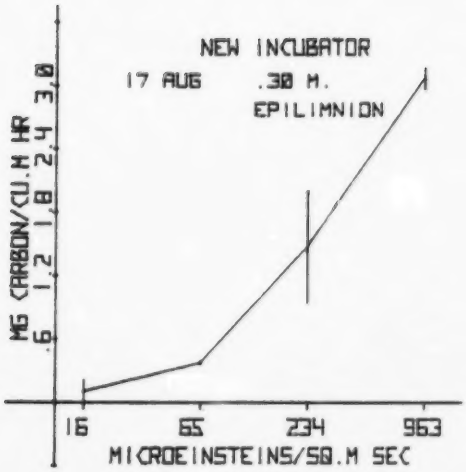
EPILIMNION
MG CARBON/CU.M HR
1.4 2.8 4.2 5.6 7.0
16 63 204 863
MICROEINSTEINS/SQ.M SEC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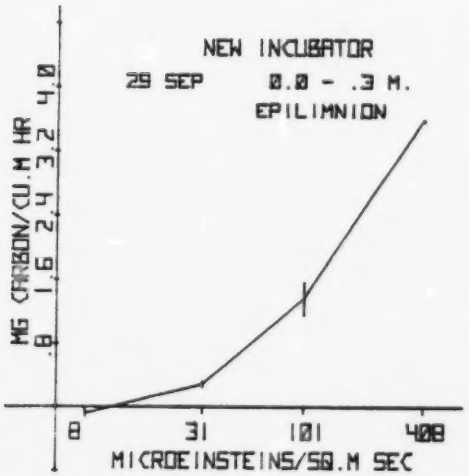
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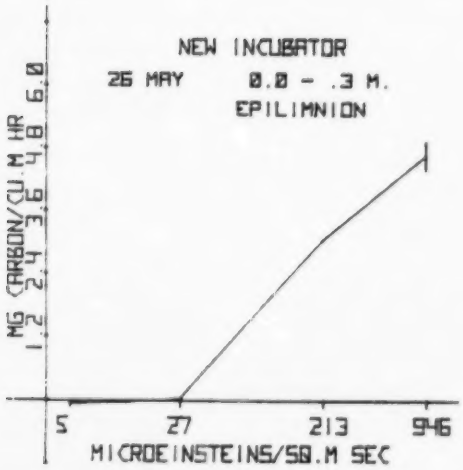
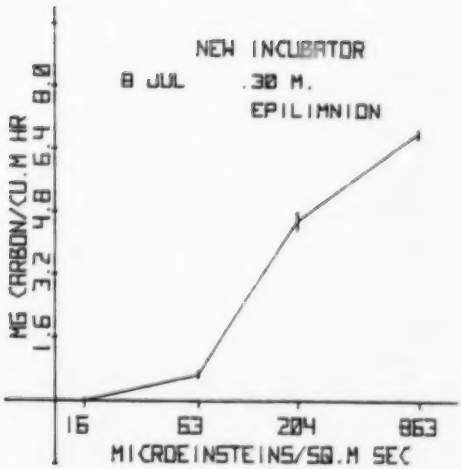
LAKE 421


NEW INCUBATOR
26 MAY 0.0 - .3 M.
EPILIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
5 27 213 946
MICROEINSTEINS/SQ.M SEC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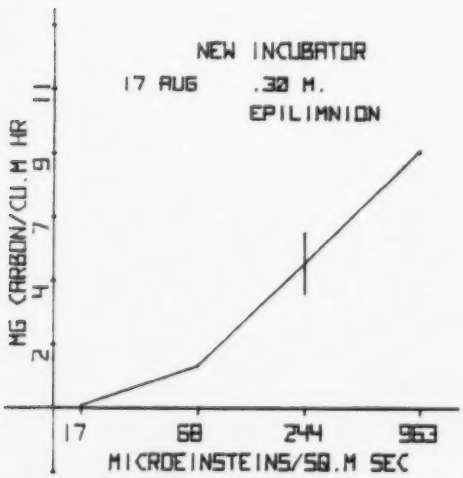
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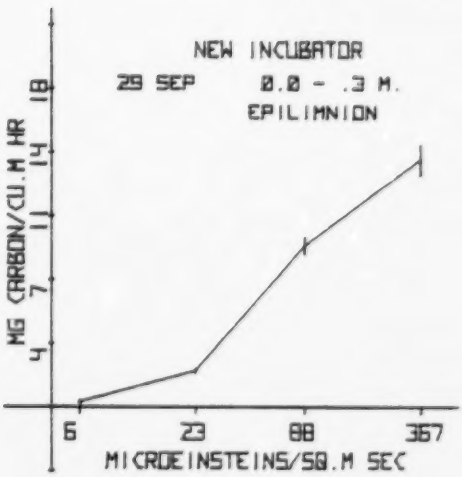
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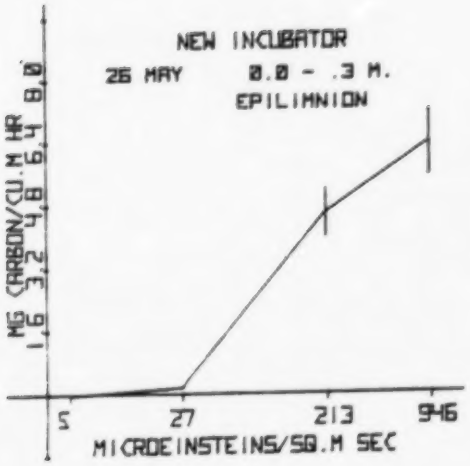
MICROEINSTEINS/SQ.M SEC

LAKE 428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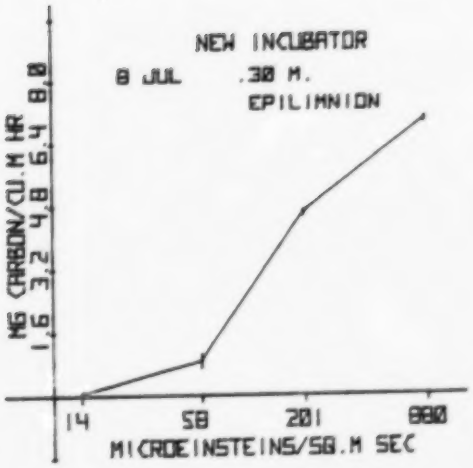
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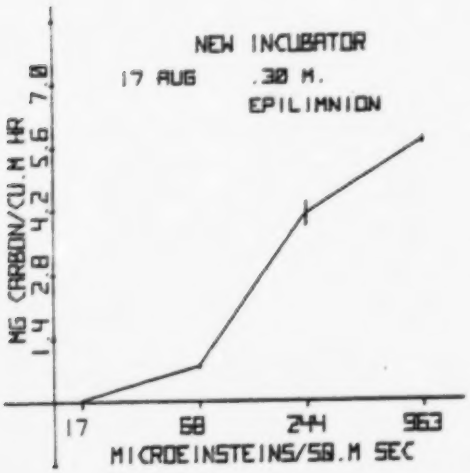
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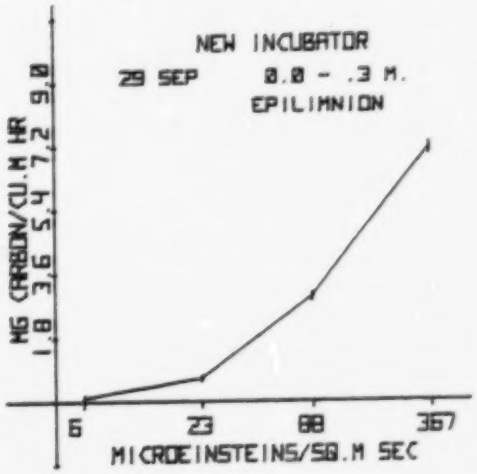
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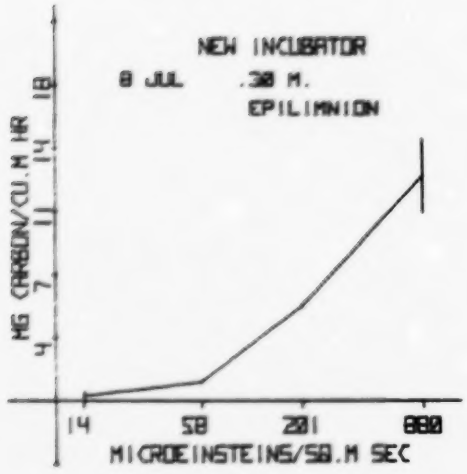
MICROEINSTEINS/SQ.M SEC

LAKE 430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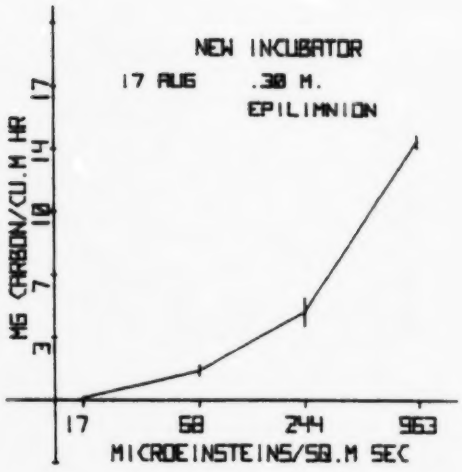
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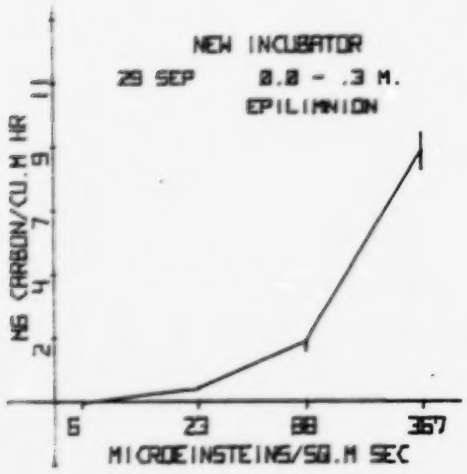
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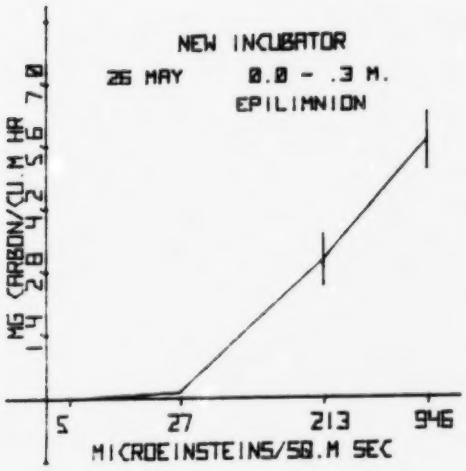
MICROEINSTEINS/SQ.M SEC

LAKE 622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MG CARBON/CU.M HR
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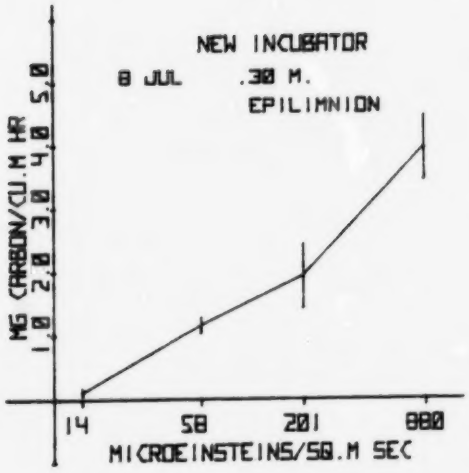
MICROEINSTEINS/SQ.M SEC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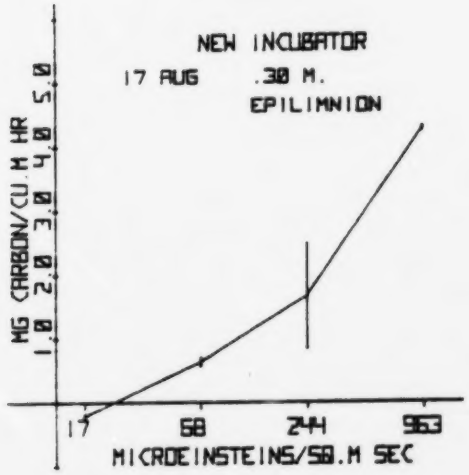
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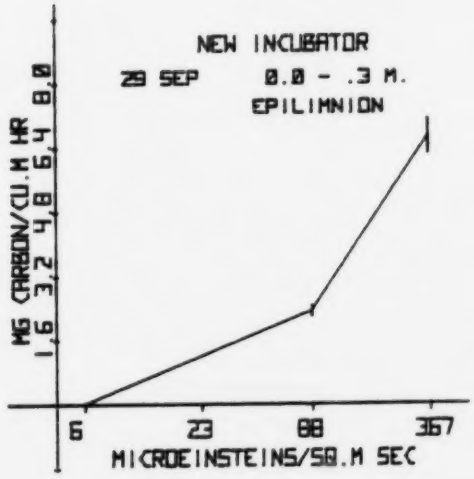
NEW INCUBATOR
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MG CARBON/CU.M HR
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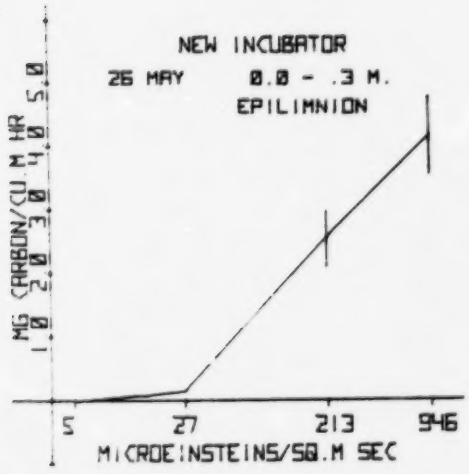
MICROEINSTEINS/SQ.M SEC

LAKE 629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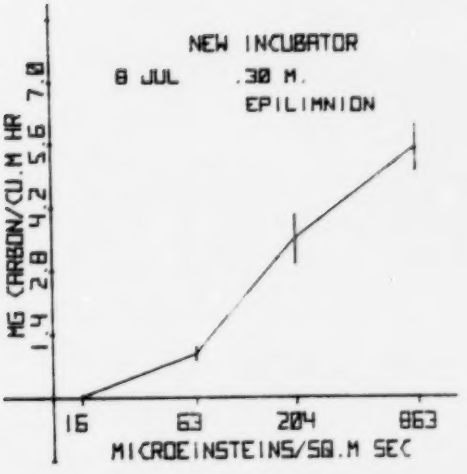
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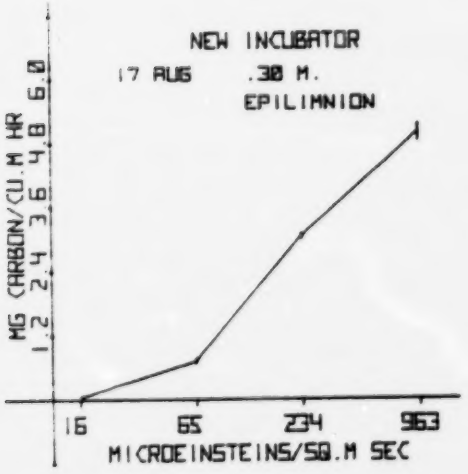
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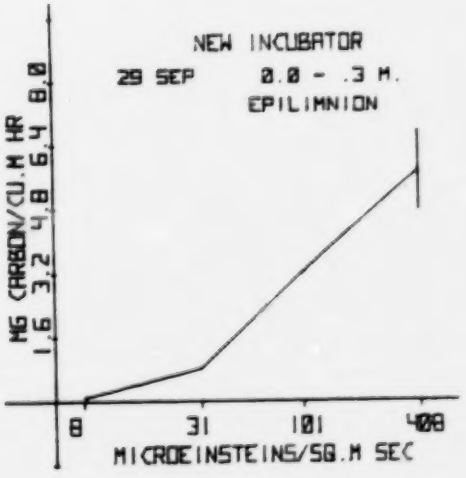
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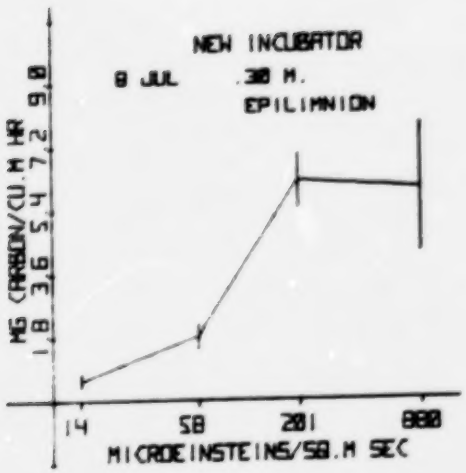
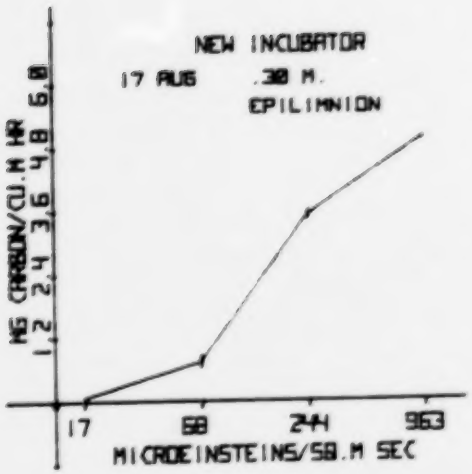
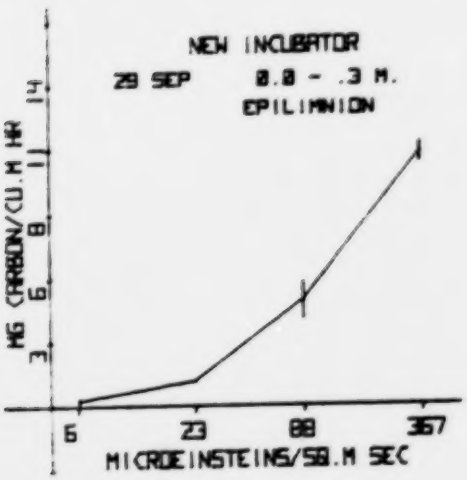
MICROEINSTEINS/SQ.M SEC

LAKE 658


NEW INCUBATOR
8 JUL .30 M.
EPILIMNION
MG CARBON/CU.M HR
1.8 3.6 5.4 7.2 9.0
14 58 201 800
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
17 AUG .30 M.
EPILIMNION
MG CARBON/CU.M HR
1.2 2.4 3.6 4.8 6.0
17 68 244 963
MICROEINSTEINS/SQ.M SEC


NEW INCUBATOR
29 SEP 0.0 - .3 M.
EPILIMNION
MG CARBON/CU.M HR
3 6 8 11 14
6 23 88 357
MICROEINSTEINS/SQ.M SEC

POOR

QUALITY

ORIGINAL